Public opinion on the smoking ban: The impact of mass media, interpersonal communication and intrapersonal variables

A dissertation presented by
Carmen Borrat-Besson

Supervised by
Prof. Peter J. Schulz

Submitted to the
Faculty of Communication Sciences
Università della Svizzera italiana

for the degree of
Ph.D. in Communication Sciences

November 2010

ABSTRACT

This dissertation examines individual opinion formation in the context of the smoking ban that was voted in Ticino in March 2006 using a complex model that includes self-interest, political predispositions, media use, interpersonal discussion and perception of community support for the policy proposal. These variables were assumed to impact individual's belief systems (salience of the different arguments and beliefs about the smoking ban) which in turn would determine recipients' opinion on the smoking ban. Self-interest, political predisposition, media use, interpersonal discussion, perceived support and belief systems were measured in a longitudinal opinion survey. In parallel, a content analysis examined the coverage of the debate on the smoking ban. Hypotheses related to media impact were formulated on the basis of the results of the content analysis. The results from the structural equation modeling (SEM) analyses revealed that self-interest, interpersonal discussion and perceived support were important predictors. Their impact on general opinion about the smoking ban was principally mediated by beliefs about the smoking ban. In contrast, media exposure did not significantly impact opinion formation. Several explanations for the lack of media effect are discussed in the conclusion.

Acknowledgements

I would like to gratefully acknowledge the supervision of my major professor, Dr. Peter J. Schulz. His confidence in my abilities was an important part of my personal and professional growth throughout this process. The opportunity to work for the Institute of Communication and Health was also a great and enriching experience.

I would like to make a special mention of thanks to Prof. James Jaccard and Dr. Michelle Hospital who welcomed me at Florida International University of Miami. I was profoundly touched by their commitment to my project. It was through their kind willingness to meet with me regularly and their generosity of time and knowledge, that this work was possible.

I also wish to thank Dr. Meinrad Perrez for being the first to encourage me to continue my academic career and pursue a doctorate.

Thanks to the Swiss National Science Foundation that financed my visit to the Florida International University, where I refined and deepened my analysis.

I would like to thank my parents, Stéphane and Marlyse Faustinelli, my sister Patricia Faustinelli-Bruttin, and my future mother in law, Christiane Borrat-Besson for their support. A special thank for my beloved one, Pascal Borrat-Besson, whose love, patience and generosity was immeasurable throughout this process.

I would also like to express my sincere appreciation for my friends and colleagues of the University of Lugano for their support, that allowed me to persist and make this accomplishment a reality, and for all the good time we spent together: Anke Dunkel, Dr. Maria Caiata-Zufferey, Alessia Antonietti, Marco Bardus, Michel Schneider.

DEDICATION

I dedicate this dissertation to Pascal Borrat-Besson. Without his patience, love and support, the completion of this work would not have been possible.

Table of contents

List of tables

List of figures

INTRODUCTION

In the field of communication, public opinion has long triggered great interest, especially in the political sciences, where referendum and elections are very interesting contexts in which public opinion process become activated. Public opinion has been described as a communication process including psychological (attitudes and beliefs), social (group discussion and norms) and political (elite perspective presented in the media) components (Hoffman, Glynn, Huge, Sietman and Thomson's, 2007).

The communication process usually begins with a minority of individuals who call into question a given situation and undertake an action (e.g., a group of citizens who contests smoking in public places and requires a smoking ban). Politicians and well-established social organizations are then usually the first public to formulate an opinion about the issue at stake and to get organized into opinion fractions. In a following step and after some media coverage, a public of interested individuals will also form among the entire population. These individuals will be informed about the issue at stake through the media, and will then discuss the matter within their circle of acquaintance and try to form their own individual opinion on it. Mass media and interpersonal communication play a crucial role as they provide the information needed to form an opinion. However, the same information will not have systematically the same effect since people react differently depending on their preconceptions.

Public opinion can be viewed as a large-scale conversation where individual opinions are shaped by the interactive effect of intrapersonal and contextual variables. If numerous scholars already integrated all these components in their theoretical framework (Davison, 1957; Price & Roberts, 1987; Zaller, 1992; Hoffman et al. 2007), few presented empirical models for analyzing the whole process. And occasions to examine the various

components as they overlap and intertwine to form public opinion are rare, because rich datasets are needed in order to do so. Existing studies focus generally on only one aspect and the preference is usually given to the impact of media on public opinion.

This dissertation aims at simultaneously examine multiple factors associated with public opinion in order to arrive at a more comprehensive understanding of individual opinion formation during a public debate. To this purpose, the data collected by the Institute of Communication and Health on behalf of the Swiss Tobacco Control Fund during the debate on the implementation of a smoking ban in Ticino were used. In 2004 the Ticino parliament started to seriously consider the introduction of a smoking ban in all public places like bars, restaurants and nightclubs. Since Ticino was the first Swiss canton to plan such a law, the evolution of the public opinion was closely monitored. A detailed content analysis of the principle Swiss newspapers was conducted. Parallel to this analysis, several opinion surveys were conducted over two years among the Ticino population. This rich dataset offered a unique opportunity to examine public opinion more closely.

This work is organized as following: chapter one presents the historical evolution of the tobacco issue. The objective is to show that the actual debate about the smoking ban has a long history. As Brandt (2007) highlighted in his book titled « The Cigarette Century », smoking was one of the most if not the most important health issue of the twentieth century. This chapter briefly presents some historical landmarks.

Chapter two more specifically presents the theoretical foundations of this dissertation. It first addresses the different conceptualizations of public opinion, as well as the different empirical approaches to study it. Indeed, despite its currency, the concept of public opinion remains very controversial and there is still no agreement on a definition nor on the best methodological approach to study it. Moreover, turning to population surveys is also strongly criticized by some public opinion scholars. The purpose of this chapter is to present the existing perspectives in order to better situate this dissertation in the larger

context of public opinion research. Then, I give a psychological insight into individual opinion formation. To this purpose, two models of political judgments ─the accessibility and on-line model─ are presented. They are very common in public opinion research and attempt to describe the internal process by which individuals convert information from their environment into political evaluations. And finally, I address the three source of influence that according to Hoffman et al.'s (2007) model impact public opinion and determine individual opinion formation: individual predisposition, media coverage and interpersonal communication. At the end of each theoretical sections, the related hypotheses are formulated.

After having outlined the historical and the theoretical background, chapter three presents the methodology applied for this study. The features of the content analysis and of those of the opinion surveys are described. In addition, the general analytical approach adopted in this dissertation are presented.

Chapter four presents the analyses that were conducted and the results. First, some results of the content analysis are presented in order to give an overview of the newspaper coverage that prevailed just before and during each opinion survey. The intensity of media coverage, the general newspaper slant, the type of arguments that were exchanged and the degree to which each argument was disputed in the media are examined in detail. In light of these results, hypotheses related to media effects, that are formulated very generally in the theoretical part, are specified. In a second step, the preliminary analyses that were conducted on the survey data in order to define the model that should be fit to the data are described. Finally the last part of chapter four present the final model that was fit to the data and discuss in detail the results that were obtained.

Lastly, chapter five provides a summary of the research performed in this dissertation. The key results are discussed in light of the corresponding literature. In addition some research limitations as well as some suggestions for future research are presented.

1. CONTEXTUAL INTRODUCTION

The public debate around tobacco consumption is not new: It has a long history that started for Europe during the second half of the sixteenth century and then experienced a radical turning point in the twentieth century. This chapter will examine the historical evolution of the issue, allowing us to better understand the nature of the arguments exchanged and the reactions people have currently. The following are some historical landmarks of what Brandt (2007) calls "The Cigarette Century."[1]

1.1 General History of Tobacco and Cigarette

1.1.1 Triumph of the Industrialized Cigarette

Although tobacco consumption rapidly spread since its introduction in Europe in the second half of the sixteenth century, the situation radically changed at the turn of the twentieth century and —more precisely— with the emergence of the industrialized cigarette. Indeed, the invention of the rolling machine in 1881 revolutionized the tobacco industry, plunging the industry into mass production and consumers into mass consumption. The tobacco industry suddenly shifted from manual production of 10 cigarettes an hour to an industrialized production of more than 200 cigarettes every minute.

1 This contextual introduction uses Brandt's book "The Cigarette Century" (2007) as main reference. Other references are mentioned in the text.

With the industrialized cigarette, the tobacco industry was confronted with a problem that was wholly new at that time: the inherent problem of overproduction. There were simply not enough smokers on the market to purchase the cigarettes that were produced. The solution to overcapacity of mass production was *creation of demand* through aggressive solicitation of new smokers. The tobacco industry turned out to be very creative and clever, inventing most of the modern marketing techniques (Brandt, 1990; Hanson & Kyser, 1998/1999).

Due to these marketing efforts, cigarette consumption experienced a rapid boom during the first half of the twentieth century. Women and young people began to smoke, which was considered rather unusual and even immoral at that time.

1.1.2 From Pleasure to Addiction

The twentieth century also became a success story for anti-tobacco movements. Over time and with the help of scientific evidence, these movements established the idea that tobacco consumption is an addiction that causes serious, even lethal, diseases (Brandt, 1990).

Opposition to tobacco consumption and, more specifically, to cigarette smoking first appeared in the late nineteenth century. These anti-tobacco campaigns were conducted by "a small army of zealous reformers" (Fee, Brown, Lazarus, & Theerman, 2002, p.931), were highly morally laden and, for several reasons, not successful. For one, cigarette smoking became popular rapidly, and there were too many who were smoking without apparent consequences, so people did not believe that smoking was immoral or deleterious. Second, modern physicians and scientists themselves gave in to the temptation of smoking, which undermined the credibility of any health-related discourse about smoking. Finally, a majority of people —many physicians among them—

protested against the prudery and the Puritanism that prevailed at that time. Moral claims, the principal weapon of the anti-tobacco movement, had become irritating and outmoded.

The situation changed radically once it became possible to replace moral judgment with indisputable scientific evidence. In the 1950s, a breakthrough came with two epidemiological studies conducted independently in the United States (Wynder & Graham, 1950) and Great Britain (Doll & Hill, 1950), reaching the same conclusion: Lung cancer was much more likely among smokers —especially among heavy smokers — than among non-smokers. Even if smoking was not the only etiologic factor, these studies proved that smoking has to be considered as a significant determinant. Thereafter, a number of investigations, employing a wide range of approaches, further corroborated the relationship between smoking and lung cancer.

1.1.3 Tobacco Industry's Effort to Disrupt Scientific Consensus

Scientific evidence showing that smoking was related to serious and even lethal diseases represented a real threat to the tobacco industry. Most damaging was the fact that these results were widely reported in the media. The industry did not take long to react (Hansen & Kysar, 1998/1999).

The tobacco companies strategically planned to sow doubt among the scientific community about the relationship between smoking and cancer. To this end, they began to finance research programs aimed at confusing the conclusions that had been drawn from scientific literature about smoking. These scientific research programs were accompanied by intense public relations activities, aimed at spreading uncertainty through the media to the population, among the scientific community, and physicians. For instance, the tobacco industry carefully gathered all statements or potential evidence,

“no matter how tangential or insignificant” (Brandt, 2007, p. 195), that called into question the causal relationship between smoking and cancer and sent this collection of “counter-evidence” to each journalist who planned to write a critical article. Tobacco companies distributed their own free periodical, *Tobacco and Health*, to all doctors and dentists, which succeeded as an important device in sustaining doubts among them. The companies funded university professors who clearly expressed skepticism about health impact of smoking or defended alternative explanations. These professors appeared at conferences around the world to “promote” their point of view.

1.1.4 Need for Consensus: Surgeon's General Report

The strategy fomented by the tobacco industry was quite successful. In the late 1950s and early 1960s, confusion persisted among the public. Uncertainty was also widespread among scientists and physicians; most of the time, they did not know what to tell their patients with respect to smoking.

This situation, caused by persistent denials by the tobacco industry about the health effects of smoking, initiated a procedural innovation in medicine and public health: the consensus report. For the first time, it became necessary to conduct an independent and unbiased scientific literature review on the smoking question that would impose a consensus among scientists, physicians, and public health officials. The impulse for such a report came from a 1961 alliance of four prominent American health organizations — the American Cancer Society, American Heart Association, National Tuberculosis Association, and American Public Health Association— that urged President Kennedy to form an expert commission to work on the question. This task fell to the Surgeon General Luther L. Therry, who convened and supervised a committee of experts; in 1964, the committee issued the first official report titled *Smoking and Health: Report of the Advisory Committee to the Surgeon General*. Upon review of more than 7,000

scientific articles, the report officially confirmed the damaging health effects of smoking.

A thorough and objective scientific literature review was the first objective of the Surgeon General's report. Its second and actually main purpose was to provide a document with enough scientific authority that justifies political actions against the tobacco industry. And indeed, the publication of the 1964 report engaged the tobacco industry in political wars. Two regulations were at the center of the debates: the health warning labeling and the ad ban.

1.1.5 Passive smoking

Investigations related to secondhand smoke started in the 1960s in a social context where people became concerned about air pollution, notably from factories and automobiles. However, the health effects of secondhand smoke were much more difficult to detect or to establish as scientific evidence. By the beginning of the 1980s, three important studies were published. An epidemiological longitudinal study conducted by Hirayama (1981) found that wives of smokers and ex-smokers were more likely to develop lung cancer than wives of non-smokers. A case control study conducted in 1978 and 1980 by Trichopoulos and his colleagues (1981) in Greece reported similar findings. Examining the effect of smoking on indoor air quality, Repace and Lowrey (1980) concluded that familiar environments such as bars and restaurants were heavily polluted. Environmental smoke exceeded legal levels for carcinogens by 250 to 1,000 times.

The possibility that passive smoking could be harmful was first evoked in the 1972 Surgeon General's report. Reports published in 1979 and 1984 devoted more attention to this question, but both lacked conclusive evidence and refrained from giving a definite statement. A turning point came in 1986 when both the Surgeon General and the National Academy for Sciences published reports that decisively portrayed secondhand

smoke not only as an annoyance but as a real health hazard. Both reports were criticized for their vagueness and the quality of the available studies (Viscusi, 1992; Bayer & Cologove, 1999); nonetheless, they provided new impetus for government regulations.

However, antismoking activists did not wait for scientific evidence before demanding further restrictions. They made the most out of the emerging consensus to fuel public discussion and promote political initiatives (Bayer & Cologove, 1999). After the release of the 1986 reports, the restrictions multiplied. In 1988, the Congress banned smoking on all flights of two hours or less. It expanded the ban to all domestic flights two years later. Anti-smoking groups lobbied, and still lobby, for establishment of a general ban on smoking in public places.

Faced with this additional threat, the tobacco industry applied the same strategy as for active smoking. It attacked the accumulated findings, continuously asserted that the health consequences of passive smoking were unproven, and created its own science by funding research programs able to provide results favorable to the industry's interests. Its principle objective was to shift attention away from smoke and toward other indoor or outdoor pollutants responsible for non-smokers' lung cancer.

Parallel to its intrusion into the scientific debate, the tobacco industry actively tried to reframe the public discourse on smoking. It addressed manners and mutual respect by telling individuals that tensions between smokers and non-smokers could be resolved by respectful negotiation. It also emphasized the freedom of smokers and portrayed restrictions on smoking as an unjustified government intrusion into citizens' personal behavior. For instance, a typical ad portrayed a non-smoker who explained, "The smell of cigarette smoke annoys me. But not as much as the government telling me what to do." Finally, the industry also tried to frame the situation as discrimination toward smokers.

1.2 Situation in Switzerland[2]

1.2.1 General Indifference from Public Health Officials

While the debate about tobacco-related health hazards was raging in the United States and England in the 1950s and the 1960s, few health officials really took a position on the smoking question in Switzerland. Several health associations were well established; the most important are the Swiss Cancer League, the Swiss Alcohol Prevention Institute, and the Lung League. However, they all hesitated to engage actively on tobacco issues for fear of losing members who smoked and, as a consequence, revenue coming from donations. While the Swiss Cancer League was actively studying the relationship between lung cancer and smoking, until the 1980s, it refused to be publicly associated with tobacco-related issues. In the same vein and during the same timeframe, the Swiss Alcohol Prevention Institute focused exclusively on alcohol problems and allied with anti-tobacco movements only to strengthen its political lobby and further its own alcohol-related interests.

The first anti-tobacco organization, the Tobacco Education Association, was founded in 1947 and came from the temperance and abstinence movement. It remained —until its disbandment in 1967 due to a lack of financial resources— the only association dedicated exclusively to tobacco issues. However, all in all, it had little impact.

1.2.2 Anti-tobacco Movement Get Organized

In 1972, at the instigation of the Swiss Association against Tuberculosis, an antitobacco

2 The following references were used for this chapter: Hengartner & Merki (1993); Meier (2003); and Bollinger-Salzmann, Cloetta, Bähler, Müller & Hofmann (2000)

coalition, called Swiss Association for Smoking Prevention (AT), was founded. The aim was to create an umbrella organization for coordinating more local anti-tobacco actions. The organization was initially ambitious: For instance, it aimed at promoting a tax increase for tobacco products and a law prohibiting advertisements. It also planned to create anti-tobacco organizations at the cantonal level. However, its beginnings were laborious and its first achievements minimal. On one side, the organization was lacking money and, on the other side, it did not really dare to publicly question a habit that was widely accepted. Fearing they would be accused of fanaticism, they engaged only halfheartedly in political actions. At the end of the 1970s, AT's work was limited to documenting information on smoking.

In the 1970s, annoyance and potential health hazard of secondhand smoke became a growing issue. In response to these developments, the AT founded in 1977 the Swiss Association of Non-smokers (SAN). Dedicated to non-smokers' rights, the association aimed at promoting non-smoking areas or complete smoking bans in public places such as restaurants, post offices, workplaces, and on public transportation. In this respect, it regularly published a list of restaurants offering non-smoking areas and put pressure on private and public actors. Nonetheless, its social impact remained limited.

1.2.3 Significant Evolution in the 1980s

In the 1980s, the situation evolved significantly. The AT and the SAN received more money through the alcohol tithe paid by the cantons. Moreover, the AT became recognized at the national level as the coordination offices for smoking prevention and cessation. For instance, it was entrusted by the Federal Office of Public Health with the responsibility of organizing World Health Day in Switzerland (which was devoted to smoking in 1980 and 1988) and the World No Tobacco Day since 1985. Thanks to these events, AT became more visible and popular while it also garnered legitimacy at the

political level.

This situation was beneficial for the Swiss Association of Non-smokers, too. Due to a favorable social climate, people were much more receptive to health messages related to passive smoking. People became sensitive to air and environmental pollution and, at the same time, more and more aware of health risks. Moreover, the first scientific studies about health hazards caused by secondhand smoke received large media coverage. Taking advantage of the situation, the association reframed the smoking debate. Instead of accusing smokers of poisoning themselves and trying to force them to stop smoking, anti-tobacco protagonists emphasized the rights of non-smokers to inhale clean air. This shift breathed new life into tobacco debate and increased social pressure on smokers. In the 1980s, the Swiss Association of Non-smokers earned several victories: It convinced the PTT to ban smoking in telephone booths in 1981 and in all post offices in 1985. Militating for the protection of non-smoking workers, it received support from federal agencies (BIGA and SUVA), which, in 1986, started to reflect on potential legal restriction at workplaces. These discussions lead to the enactment of the 1993 regulation on the protection of non-smokers at their workplace.

The 1980s are marked by the entrance of the Swiss Confederation and the Federal Office of Public Health into the field of tobacco prevention. Up to that moment, the Swiss government was reluctant to pass any serious tobacco regulations. Divided between health and fiscal stakes related to tobacco, for a long time, the government gave priority to its tax policy. It was only under international pressure that the Swiss government found itself forced to base its tobacco politics on health-related issues.

1.2.4 Political Regulations

At the political level, the debate first focused on fiscal stakes. In the 1960s and especially

after the publication of the Surgeon General's report, several politicians tried to call attention to health issues related to tobacco. Two regulations were heavily debated: the ad ban and, later, the smoking ban.

1.2.4.1 Ad ban

The advertisement ban was a recurring issue in the second half of the twentieth century. Since 1950, several motions or postulates were submitted. The Federal Council was reluctant to impose strict regulations and rejected most of the propositions. Only one legislation —a television advertisement ban for tobacco, alcohol, and medicines— passed in 1964. For a long time, it remained the only regulation on advertising activities of tobacco products.

Several popular initiatives requiring a strengthening of 1964's ad ban were addressed to the authorities. The Guttempler initiative was submitted in 1974, and the so-called twin initiative in 1993. Each time, the Federal Council recommended to vote against the proposed initiative or for a less-far reaching counterproposal. All proposals for ad restrictions were rejected by the population. The Federal Council accepted finally only a minimal modification in 1995, where ads that specifically targeted minors and encouraged them to smoke were banned.

Several factors make the political actions of anti-tobacco protagonists challenging. First of all, the tobacco industry exerts a powerful lobby within the Swiss government. Forming alliances with the advertisement and the press industries, it actively defends its right to advertise. Moreover, the government is caught in a conflict of interests: On the one side, an ad ban stands to reason under a health perspective. On the other side, it risks decreasing the number of smokers and, as a consequence, tax revenues.

Nowadays, nothing has changed at federal level: Advertising is banned on television and when it specifically targets youth under 18. At cantonal level, some cantons have enacted

more severe restrictions on ad-ban.

1.2.4.2 Non-smokers' Protection and Smoking Ban in Public Places

The debate about passive smoking and non-smokers protection emerged in the second half of the 1970s and heated up during the 1980s. Despite the lobbying efforts of the Swiss Association of Non-smokers, the Swiss legislation concerning non-smokers' protection remained quite weak at federal level until recently. Only one nonrestrictive law since 1992 sets the protection of non-smokers at their workplace. In accordance with the Swiss Labor Law: "The employer is required to ensure as far as possible that non-smokers are not annoyed by other people's smoke" (OLT3 Art. 19). As seen, the law is not really restrictive as it has to be applied "as far as possible."

The decision to set up legislation that is more restrictive and to expand it to other public places came from cantons. In 2006, Ticino was the first canton to introduce the smoking ban. This regulatory advancement developed in several steps (Medici et al., 2006/2007): In October 2004, a proposal on a smoking ban was presented to parliament, which accepted it after one year of parliamentary debate. At that point, the law would have passed easily had it not been the strong opposition of a right-wing party called Lega. In Switzerland, those who oppose a revision of the law can require it to be voted on by the population if they collect enough signatures (50,000) against the amendment of the act within a period of 100 days. This is what was done by the Lega, and that is why the Ticino population was requested to vote on the smoking ban. The referendum took place on March 12, 2006 and —to Lega members' great surprise— a high majority of the population (79%) voted in favor of the smoking ban.

Ticino's experiment had a snowball effect. Other cantons also began to ban smoking in public places. Moreover, discussions were launched for smoking restrictions at national level.

2. THEORETICAL BACKGROUND

2.1 Public opinion process

This study examines public opinion formation with respect to the smoking ban that was voted on in Ticino in March 2006. But what is meant by public opinion? Several generations of scientists have addressed this question. However, despite its currency, the conceptualization of public opinion remains very controversial and there is still no agreement on either a definition or on the best methodological approach with which to study it (Noelle-Neumann, 1993). Since its first appearance in the 17th century, the conceptualization of public opinion unceasingly has evolved and the different definitions that coexist today are the result of its historical mutations. The following briefly reviews the most common approach in order to better situate this dissertation in the larger context of public opinion research.

2.1.1 Public opinion as a form of social control

Tracing the history of the notion of public opinion back to the 17th century, Elisabeth Noëlle-Neumann (1993) highlighted a first, pejorative definition that prevailed in the sociological and political literature of that time. She found that, during Enlightenment, public opinion referred primarily to a form of social control that constrained people to conform to norms, morals, and traditions. This old conceptualization, which prevailed in Rousseau's (1762) writings, is associated with reputation, honor, and tradition, and carried a rather negative connotation.

From the mid-eighteenth century onward, this conceptualization completely disappeared, supplanted by the modern conception of public opinion that will be presented in the next chapter. It falls to Noëlle-Neumann (1993) to have updated it. Indeed, her spiral of silence theory is one of the rare public opinion theories that integrates such a conceptualization of public opinion. Like Rousseau, Noëlle-Neumann (1993) holds that people's behaviors are dictated by the pressure to conform to others' opinion. People constantly scan their environment in order to gather information about what others think about the issues at stake. Because people fear of becoming isolated with an unpopular opinion, they are more inclined to express popular point of views and tend to refrain from expressing unpopular ones. This dynamic leads to a spiraling process, where unpopular views become increasingly silent, while the popular ones increasingly visible.

Central to this approach is people's perception of what the majority think about the issue at stake and their own fear of isolation. Research conducted within this public opinion framework usually examines the impact of perception of climate of opinion on people's willingness to express their own views.

2.1.2 Public opinion as a result of a rational public debate

The modern definition attributes public opinion to a political connotation and defines it as a collective decision resulting from a rational public debate. This definition emerged in the 1770s in France (Baker, 1989; Blondiaux, 1998).

At that time, French public life was going through a profound crisis (Baker, 1989). Nobles and intellectuals (e.g., clergy and parliament members) rebelled against absolute monarchy and questioned the king's authority. The protestation climate spread through the entire population, and the monarchy suddenly found itself unable to control the

popular agitation and restore calm and order among the population.

In this context, where traditional authority was discredited, public opinion appeared, for dissenting intellectuals, to be a potential substitute, a source of authority capable of counterbalancing the king's authority. Intellectuals often referred to public opinion in order to legitimate their political claims. Public opinion was “an implicit new system of authority, in which the government and its opponents competed to appeal to 'the public' and to claim the judgment of 'public opinion' on their behalf” (Baker, 1989, p. 172). However, the “public” whose opinion should be considered remained undefined. It was an “abstract authority” (Baker, 1989, p. 172), “a political or ideological construct without clear sociological referent” (Price, 1992, p. 12).

Later historical interpretations assume that this “abstract authority” was actually composed of intellectuals, men of letters, and cultivated bourgeois, all of whom demanded to get involved with socio-political decisions and who gathered in institutions of political discussion (e.g., parliament, political clubs, coffee houses) in order to freely debate on issues of general interests (Blondiaux, 1998; Habermas, 1962; Ouzouf, 1988; Price, 1992).

This conceptualization of public opinion makes a clear distinction between public opinion and common opinion (Blondiaux, 1998). Public opinion relies on a reasoned political debate conducted by the knowledgeable elite and thus refers to the opinion of a specific group of “enlightened” individuals. In contrast, common opinion refers to the opinion of the mass of ignorant, unpredictable, and violent individuals that constitute the population. This opposition between enlightened and common opinion or between the elite and the masses will remain a recurrent issue in literature dealing with public opinion (Blondiaux, 1997). If, during Enlightenment, public opinion clearly referred to the opinion of a restricted group of intellectuals, the issue becomes more and more confusing with the democratization of the society and the entry of the masses into politics. The boundaries will become blurred until public opinion definitively became

mass opinion with the advent of opinion surveys.

2.1.3 Public opinion poll and the triumph of the individualistic approach of public opinion

Towards the end of the 19th century, public opinion progressively became the object of empirical investigation by social sciences (Price, 1992). However, before the advent of poll surveys, public opinion remained a fuzzy concept in the field (Blondiaux, 1998). Multiple definitions coexisted and practices to assess public opinion were very heterogeneous. Public opinion appeared to be an impalpable evidence.

The advent of poll surveys in the 1930s represented a significant turning point. Two interrelated methodological advancements can be viewed as the origin of this change (Blondiaux, 1998; Price, 1992). The first was the development of quantitative techniques for measuring attitudes. In the 1920s, social psychologists began to deal with opinions in their research framework on attitudes, and for the first time, it became possible to assess individual opinions and to empirically investigate their properties and determinants. However, social psychology studies presented a major problem for public opinion scholars: they were not representative. Social psychologists were working quasi exclusively with university students who are far from representing the social diversity characteristic of the American population.

This problem was solved by Gallup, who had the idea of applying sampling theories to social science research. This idea was very effective; in 1936, thanks to a careful sampling design, he was able to correctly predict Roosevelt's victory over Landon, whereas the Literary Digest, whose predictions were based on a larger sample, predicted Landon's victory. This event represents a watershed moment in public opinion research. From that point on, poll surveys were rapidly established as the standard method for investigating public opinion, imposing by the way a new, individualistic definition of

public opinion. Public opinion became what polls measure: an aggregation of individual opinions selected at random in the entire population. In other words, public opinion became mass opinion.

2.1.4 The sociological approach of public opinion

In the 1950s, the dominant survey-oriented approach began to raise strong protests among sociologists who criticized the lack of theoretical reflection on the object that scholars of public opinion polling are supposedly seeking to study (Blumer, 1948). They called into question the suitability of population surveys as a research method for studying public opinion.

At the heart of the sociological conceptualization of public opinion, there is a clear distinction between the public and other forms of collective behaviors such as the crowd and the mass. The public refers to "a group of people (a) who are confronted by an issue, (b) who are divided in their ideas as to how to meet the issue, and (c) who engage in discussion over the issue" (Blumer, 1964, p. 189). It is a rational, collective reaction that organizes around an issue. It is composed of individuals who discuss together –either personally or through the media– in order to find a solution or an outcome to the issue they are facing. On the other hand, the crowd is a collective, emotional, and impulsive response to an exciting event that caught people's attention. A good example would be a gathering of hysterical fans when they see their idol on the street. And finally, the mass is simply a body of individuals who do not interact with one another, who are geographically dispersed, and who do not really care about one another (Price, 1992; Blumer, 1964).

By drawing their sample from the entire population, opinion surveys eliminate the distinction between the public and the masses. Each individual in the population has the

same probability of being interviewed, no matter whether they are or are not a member of the public, whether or not they took part in the collective decision process. By doing so, opinion surveys also push a fundamental characteristic of any public into the background: communication (Blondiaux, 1997). For example, a housewife who barely heard anything about the issue at stake and who never discussed it with anybody is as likely to be interviewed as a politician who actively took part to the public discussion. And in the same vein, opinion polls can be conducted on issues that are completely absent from public debate and do not trigger any deliberative process.

In the sociological perspective, the public opinion process is also viewed as a power struggle between social groups that have immediate and opposing concerns about the issues and which "differ in terms of their strategic positions in the society, […] in terms of opportunities to act [… and] in terms of prestige and power" (Blumer, 1948, p. 544, see also Bourdieu, 1972). Not all opinions are as powerful as each other. Some opinions have more weight than others simply because the group holding them is more powerful socially. The spectator-like individuals who attend the debate and who will determine the final outcome of public opinion process by aligning themselves with the one or the other group is confronted with different points of view that are already constituted. Forming an opinion in the context of public opinion process means choosing between opposing groups and well-formed positions. By simply adding individual, atomized opinions that were expressed in total isolation, population surveys do not take into account the societal level of the public opinion process. They treat each opinion as if it would have the same impact on public opinion process and as if it can be formed in a neutral way without any social pressure which completely misrepresents the reality.

Finally, in the sociological perspective, public opinion refers to a conscious and informed opinion (Boudieux, 1972, 1998). Interviewing individuals who are not knowledgeable about the issue and who actually do not have any opinion on the issue at stake, is considered to be absurd. By sampling everyone, survey agencies simply ignore

the fact that not everybody is able to understand every question and that not everybody has an opinion on every issue.

2.1.5 The deliberative approach of public opinion

The dominant survey-oriented methods also began to raise some protests among political researchers, who questionned the public nature of public opinion that is derived from opinion polls, votes, and elections (Fishkin, 1999, 2009; Fishkin & Luskin, 2000).

Their approach to public opinion is based on the conception of an ideal deliberative democracy where the public gives well-considered inputs to the policy-making process. They argue, however, that opinion polls, votes, and election results are not good indicators of public preferences because public opinion derived from population surveys are not necessarily the outcome of a deliberative process. Most of the respondents know and have thought very little about the various political issues. They do not keep themselves informed, do not discuss the issues with others, and are often asked to give off-the-cuff responses on policy issues when they are contacted by the survey agency.

In order to improve the democratic process, these researchers devised various methods that aims at eliciting a more informed and reflective public opinion (see Fishkin, 2003). Neijens and his colleagues developed the *Choice Questionnaire*, Becker and Slaton the *Televote*, Coote and Lenaghan the *Citizen Juries.* Dienel and his colleagues created the *Planning Cells,* and Fishkin and his colleagues created the *Deliberative Polling*. All of these programs aim to either give some information to the respondents before asking for his opinion or motivate him to discuss the issue with other people before re-interviewing him.

For instance, Fishkin's (1999) idea of deliberative polling is quite simple. A random representative sample is first surveyed with respect to the issue at stake. Respondents are

then invited to gather at the same place for two or three days. They are thoroughly and objectively informed by a panel of experts and invited to debate the issue in small groups. At the end of the meeting, participants are again asked to fill out a questionnaire.

If the deliberative polling is originally a civic tool designed to improve the quality of public opinion, it is also considered an experiment in social sciences where researchers can examine the effect of information and deliberation on public opinion and how public opinion would be if it would it were the outcome of a deliberative process.

2.1.6 Public opinion as a communication process

From the early 1980s, some communication scholars also departed from the dominant individualistic approach and attempted to develop public opinion theories that conceptualize public opinion as a communication process (e.g., Davison, 1957; Price & Roberts, 1987; Crespi, 1997; for a review see Glynn, 2005). Most of these public opinion models include communication as a fundamental part of the model. Price and Roberts' (1987) model is a good illustration of this theoretical orientation.

Price and Roberts (1987) view public opinion as a developing communication process that implies “a large-scale conversation” between individuals, political actors, and well-established social organizations. The communication process begins with a minority of individuals who call into question a given situation and undertake an action (e.g., a group of citizens who contests smoking in public places and requires a smoking ban). Politicians and well-established social organizations are then the first public to formulate an opinion about the issue at stake and get organized into opinion fractions. In a following step and after some media coverage, a public of interested individuals will also form among the entire population. These individuals will be informed about the issue at stake through the media, and will then discuss the matter within their circle of

acquaintance, try to form their own individual opinion and finally align themselves with one or the other opinion fraction existing at the political and organizational level.

Just like in the sociological approach (Blumer, 1948), the public is viewed as a fluctuating entity. As Price and Roberts (1987) pointed out: “publics grow in size and change in composition as the issue moves through disputation. Once the issue is handled somehow, its public presumably shrinks back again due to attrition and reduced communication” (p. 785). This theoretical point sharply questioned polls and election studies that draw their sample out of the entire population without ensuring that the individuals they survey are really part of the public.

Individual opinion formation is also an important part of the public opinion process. However, according to Price and Roberts (1987), individual opinion formation cannot be studied without any reference to the communication environment in which it takes place. The authors explain:

> In keeping with the view of public opinion as a discursive process, […] we will suggest that individual opinions arise out of public communication, consisting mainly in a person's ongoing effort to organize both cognitive and behavioral responses to a public issue. Opinions are thus linked to their surrounding social environment, originating and developing within the context of public discussion. (p.787).

Two sources of influence are taken into consideration: mass-media and interpersonal communication. Information obtained from these communication channels is integrated with individual's own thoughts about the issue at stake. Individual opinion formation is a continuous process where opinions are constantly updated as a function of new information that circulates in the community.

2.1.7 Public opinion in this dissertation

In this dissertation, public opinion will be defined as a communication process[3]. The model of Hoffman and her colleagues (2007), which builds upon this theoretical perspective was used as a guideline (Figure 1).

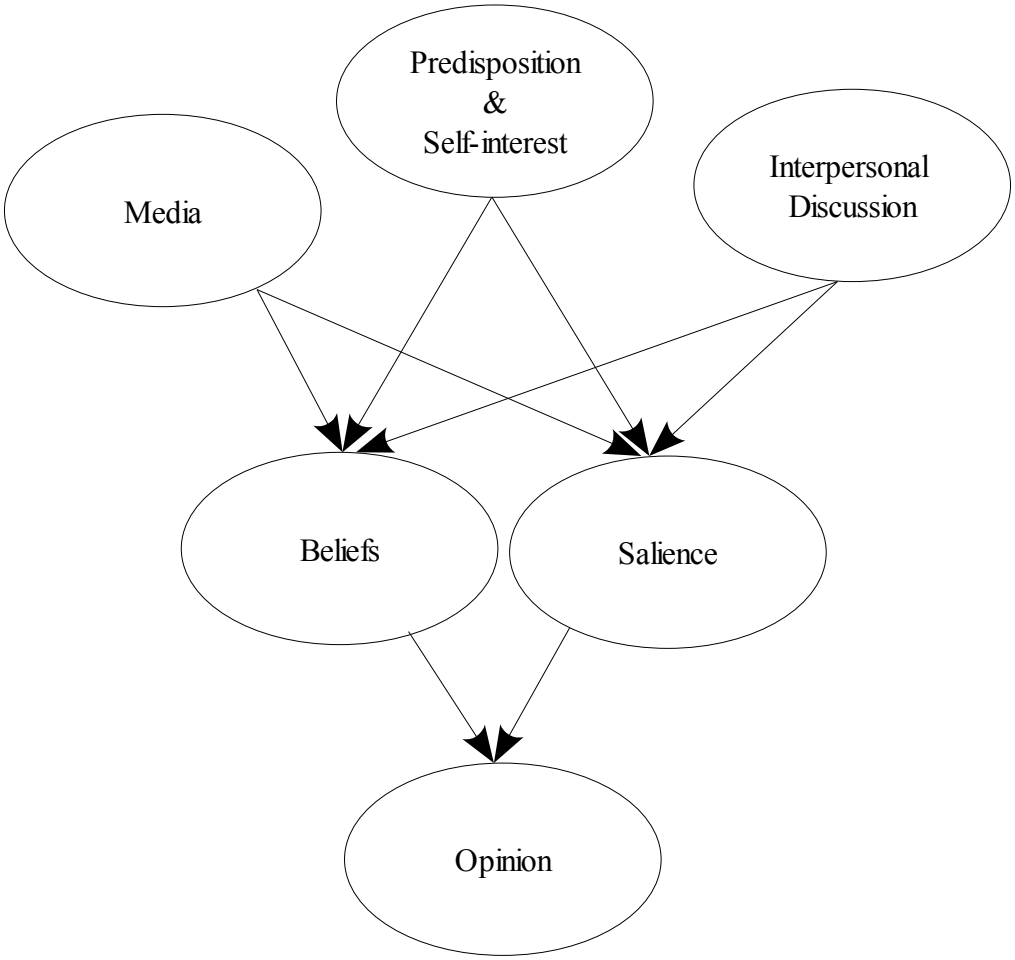

Figure 1: Model of opinion formation tested in this dissertation

3 The choice of the theoretical perspective was constrained by the available data. The fact that the data that have to be analyzed for this dissertation were collected by means of a panel survey automatically implies an individualistic approach of public opinion.

Their model emphasizes three influence sources: (1) predisposition and personal interests, (2) the media, and (3) interpersonal communication. These factors are assumed to shape public opinion process by "[filtering] out certain information while allowing others idea to become integrated with the overall opinion framework" (p. 289-290).

Predispositions and personal interests consist of different individual-level characteristics that regulate the processing, and more specifically, the acceptance of new information (Zaller, 1992). Predispositions describe "stable, individual-level traits" (p.22) that people acquire during their lifetime experiences. Ideology, values, party attachment, and race are all examples of predispositional factors. In contrast, self-interest depicts people's tendency to maximize their personal benefits and minimize their costs. Both are considered critical variables in the public opinion process. They determine people's reaction to new information as well as their attitudes toward the issue at stake.

Most of the issue-related information is conveyed by the mass media. They first make people aware of the issue. They transmit factual information, report the position and argumentative discourse of the different interested groups and actors, and tell their readers how the rest of the population is reacting toward that issue. Mass media are considered an important filter because they determine which issue-specific information will be delivered to the reader to help him to form an opinion about the issue at stake.

Once an issue is launched by the media, interpersonal discussion may begin among different group of individuals. Discussions are occasions to be exposed to others' opinion, to clarify one's own opinion, to learn new arguments in favor of or against a certain position, and to develop perceptions of which positions are most popular in society or within one's direct environment. Thus, individuals' opinions are also shaped by properties of their social environment.

In their articles, Hoffman and her colleagues (2007) examined the impact of these filters on perceived population support. In this dissertation, the focus is on issue-related beliefs

and their accessibility. People's preferences are assumed to be base on beliefs. When people read the newspapers or discuss a specific issue with others, they learn about the different characteristics that are related to the issue and form issue-specific beliefs that will guide them when forming an opinion about that issue. Each time people are exposed to new information through mass media or interpersonal communication, their beliefs structure evolves. Issue-related beliefs might weaken, strengthen, or simply change.

The accessibility of issue-related arguments refers to the likelihood that a given consideration comes to mind when people form their opinions about the issue at stake. According to psychological and political models of preference formation, people base their opinion on those considerations that are most easily retrieved from memory. And according to communication theories, media and interpersonal communication may influence the ease with which people will recall different issue-related information. For instance, the more often a piece of information appears in the media, the more likely it is that the individuals with think about that information when thinking about the issue.

The literature review that follows is organized according to this model. It will first present two models of opinion formation that are commonly referred to in public opinion research in order to show the relevance of the selected mediators. Then the relevant literature for each filter (i.e. predisposition and self-interest, media and interpersonal communication) will be presented in following chapters. At the end of each of these sub-chapters, the relevant hypotheses will be formulated.

2.2 Preference formation

Before describing what influences the formation of individual opinions, it is important to present some notions about how political judgments are formed, stored, and retrieved from memory. Insight from political psychology helps to explain how people convert information obtained from the mass media and interpersonal discussions into political preferences.

2.2.1 Beliefs: the key component of any evaluation

Most psychologists dealing with attitudes, contend that people's evaluations are based on beliefs (O'Keefe, 1990), which are attributes of the object that is under evaluation. The term “object” can refer to a person, social event, political issue, or any other entity that can be subject to evaluation and judgment. Each object has more than one attribute and is therefore related to multiple beliefs. For instance, with respect to smoking, people may believe that smoking increases the risk of cancer, that passive smoking is also damaging, that a smoking ban would force people to stop smoking, or that a smoking ban would have a negative economic impact on bar and restaurant owners.

Beliefs are “the product of interactions between brain, body, and world” (Druckman & Lupia, 2000, p. 4). They are based on information and are the result of a learning process. For instance, when reading the newspaper, people are exposed to new information and as a result form new beliefs or update old ones. All beliefs are then stored in long-term memory.

One of the most developed models of the relationship between beliefs and attitudes is Fishbein's summation model (Fishbein & Ajzen, 1975). This model assumes that people

hold many beliefs on an object (e.g., smoking increases the risk of cancer), and that each belief is linked to an evaluation (e.g., smoking increases the risk of cancer is evaluated negatively). The final attitude toward an object is the sum of beliefs multiplied by their corresponding evaluation. If all beliefs are strongly negative, then the overall attitude towards that object will be very negative, and vice versa.

As people can hold a huge number of beliefs, the following critical question arises: which of the overwhelming number of beliefs potentially related to an object influences its evaluation? Stated differently, which of the beliefs related to a given issue influences the final opinion that people will express? According to early conceptions of opinion formation, when people must give their opinion on an issue, they canvass their memory and look for the relevant issue-related beliefs. Once retrieved, they integrate them into an overall judgment. The problem is that they postulated a comprehensive memory search (Druckman & Lupia, 2000). It was supposed that people try to recall all relevant information and to integrate it into an overall judgment. But this conception soon became incompatible with the widely held view that individuals are “cognitive misers” (Druckman & Lupia, 2000; McGraw, 2000). First, people are not interested and motivated enough to perform an exhaustive memory search, weigh all the information, and compute a representative overall judgment. It is cognitively too taxing and laborious. Second, most individuals remember only a few pieces of information. Thus, several scholars have attempted to solve this apparent contradiction by proposing information processing models that are cognitively more parsimonious. Two models will be presented here: the accessibility and the online model. They both belong to the most often cited models in public opinion research. While they are very different and are often opposed to one another, these two approaches are actually complementary and help to explain different findings in communication and public opinion research.

2.2.2 Accessibility models

Accessibility models propose an elegant solution to the limited cognitive capacity of citizens. They assume that people base their preferences on only a couple of considerations, those that are the most accessible, i.e. those that are most easily retrieved from memory. If people remember only three arguments when they have to express an opinion, they base their opinion on these three arguments and do not try to search for other potential arguments.

In public opinion research, Zaller's model (1992; Zaller & Feldman, 1992) is the most influential accessibility model. Zaller argues that people form political evaluations by "averaging across the considerations that are immediately salient or accessible to them" (Zaller, 1992, p. 40). Consideration is defined as "any reason that might induce an individual to decide a political issue one way or another" (p. 40). It is "a compound of cognition and affect — that is, a belief concerning an object an an evaluation of the belief" (p. 40). Salient considerations are those that automatically come to mind when considering an issue. Because people are usually ambivalent on most issues, they remember positive as well as negative considerations. The final opinion will be an average of the positive and negative considerations that were salient at the moment the opinion was formed. If there are more positive than negative considerations, then the final opinion will be be positive, and vice versa.

Accessibility models present a clear relationship between accessible considerations and general opinion. Considerations that are more accessible from memory play a greater role in determining attitudes towards an object or an opinion towards an issue. There is widespread empirical support in psychology for the impact of accessibility on judgment (e.g., Fazio, 1995; Higgins, 1996; Higgins & King, 1981; Wyer & Srull, 1989).

In public opinion and communication research, accessibility models are often referred to in an effort to explain accessibility-related phenomena such as response effects in

surveys (Zaller & Feldman, 1992). Since the 1980s, increasing evidence has shown that the opinions people give in surveys are very sensitive to question formulation and question order (e.g., Tourangeau & Rasinsky, 1988). Even minor changes in question wording or question order can have significant effects on people's responses to attitude questions. For instance, people who first answer questions about the government's obligation to the needy expressed more support for welfare than did those who answered first questions about individual determination (Tourangeau & Raskinki, 1988; Tourangeau et al., 1989). According to accessibility models, questions that precede opinion questions increase the accessibility of certain beliefs. Changing the preceding questions influences the set of accessible beliefs that will influence people's answer to the opinion questions that follow.

The accessibility model also offers an explanation for the instability of political judgment (Sciarini & Kriesi, 2003; Zaller & Feldman, 1992). In his famous paper "The Nature of Belief System in Mass Publics", Converse (1964) finds that most people constantly change their opinion on a wide range of policy issues. The only people with coherent and stable opinions are a small group of highly politically sophisticated individuals. He concludes that most individuals do not have meaningful opinions about most political issues; they simply choose one of the answers that the interviewer proposes at random. According to Zaller and Feldman (1992), who draw upon the accessibility model, people do hold true opinions. People change their opinions because they hold conflicting beliefs on most issues and their opinion change depending on which beliefs were accessible at the moment the people were called on to express their opinion.

Finally, the accessibility model is often referred to in communication research. Three very common hypotheses on media effects - agenda-setting, media priming, and framing - imply belief accessibility. These media effects will be addressed in detail later.

2.2.3 Online model

Another group of researchers proposed another solution that also addresses the limited cognitive capacity of voters (Lodge, McGraw, & Stroh, 1989; McGraw, Lodge, & Stroh, 1990; Lodge, Steenbergen, & Brau, 1995; Lodge & Taber, 2000; Taber, Lodge, and Glathar, 2001). According to the online model, political evaluations are formed using an "online" evaluation process. Each political object is related to an “evaluation counter” (i.e., a running tally) that reflects the updated global evaluation of the political object or candidate. Each time people encounter a new information piece, this “evaluation counter” is automatically updated, just like a running tally. When the information is evaluated positively, the overall evaluation becomes more positive. Conversely, when the information is evaluated negatively, the overall evaluation becomes more negative. When people have to express an opinion, they simply look at this running tally. In other words, they just recall the overall evaluation, not all of positive and negative considerations that served to form it. So once the running tally is updated in accordance with incoming information, the information or arguments that served to update it can be forgotten. As stated by Lodge et al. (1989), this process reflects well some situations that occurs in everyday life: “people can often tell you how much they like or dislike a book, movie, candidate, or policy but not be able to recount the specific whys and wherefores for their overall evaluation” (p. 401).

In order to test this model, the authors conducted experiments (Lodge et al., 1989; 1995; McGraw et al., 1990). They first asked participants to read an informational brochure that presented a fictitious political candidate and described his positions on various political issues. While reading the brochure, participants evaluated the different information items in terms of how much they personally liked or disliked them. The results show that people's overall evaluation of the fictitious political candidate was not related to what they could recall from the information brochure. Instead, the degree to which they liked or disliked the information they were exposed to at the very moment they read it was significantly related to their evaluation of the candidate. The more they

liked what they read about the candidate at that very moment, the more positively they rated him when they had to express an opinion about him.

2.2.4 Accessibility versus online political judments

It is important to note that both models are not mutually exclusive. Both types of judgments are context-specific; that is, people can have memory-based judgment for one issue and online judgments for another one (Hastie & Park, 1986).

Researchers disagree though, on the prominence of each type of processing. According to Hastie and Park (1986), online processing occurs more frequently in general, almost automatically. They state that “normally people make many judgments spontaneously, without waiting for an instruction” (p. 262). They even assert that a challenge for researchers who want to test memory-based models is to refrain this automatic tendency. In public opinion research, opinions are divided. On the one hand, Zaller (1992) argues that “the online model is inappropriate in the domain of political attitudes” (p. 50). Still, Lodge et al. (1995) favor the online model and “believe that there are many circumstances (political campaigns being a case in point) under which memory does not play a critical role” (p.321).

The diverging conclusions may be related to the setting in which the models were tested. Most findings in favor of the online model are based on experimental studies where people are artificially exposed to a limited set of information that they listen to or read carefully. The online model has almost never been tested in survey research (Matthes, Wirth, and Schemer, 2007). However, Zaller and Feldman's (1992) findings are based on survey data and suggest that memory-based processing are more likely than assumed in survey settings. They asked people in a survey to express their opinions on different policy items using close-ended questions. Respondents were invited to think out loud

before answering the question. All of their thoughts were transcribed, and the researchers found strong support for accessibility effects. As expected by memory-based models, people's opinions were strongly related to their most accessible thoughts.

Another possible explanation for the differences between Lodge's and Zaller's claim is the processing goal, which has been identified as an important factor influencing the type of information processing (Hastie & Park, 1986; Lodge et al., 1989; 1995; McGraw et al., 1990). When people know in advance that they must form an opinion about an issue, online processing is more likely to occur when they read or hear something. In contrast, if people have no specific processing goal when they read or hear something, or if their goal is to retain as much information as they can, then memory-based processing is more likely.

Lodge focuses on candidate evaluation, whereas Zaller generally focuses more on a wide range of policy issues. In the case of candidate evaluation, people might anticipate that they will have to form an opinion on what might automatically activate online processing. In contrast, people cannot anticipate that they will be questioned on different political issues in a survey. Even if they have read something about the political issue in question, they may not have processed the information with the goal of forming an opinion.

2.2.5 Hypotheses related to preference formation

The following hypotheses are based on the aforementioned literature:

Hypothesis 1

The salience of positive and negative considerations about the smoking ban will be related to the general opinion about the smoking ban. More specifically, respondents who are able to remember positive considerations (i.e., pro argument) are more likely to

be in favor of the smoking ban than respondents who are not able to remember any positive considerations. Similarly, respondents who are able to remember negative considerations (i.e., con arguments) about the smoking ban are more likely to be against the smoking ban than respondents who cannot remember any negative considerations.

Hypothesis 2

Respondents' beliefs about the smoking ban will be related to their general opinion about the smoking ban. Respondents who held positive beliefs about the smoking ban will be more likely to be in favor of it. Similarly, respondents who held negative beliefs about the smoking ban will be less likely to be in favor of it.

2.3 Intrapersonal sources of influence

“Intrapersonal sources of influence” refers to individual characteristics that influence not only people's policy preferences but also their reaction to policy related information. With respect to public opinion research, two theoretical perspectives that address these individual level factors and that are often opposed to one another are important: the self-interest and the predispositional perspectives.

2.3.1 Self-interest

One common hypothesis among political scientists holds that citizens' political beliefs and behaviors are guided by their own narrowly defined, tangible self-interest (Sears & Funk, 1991). In this view, individuals form opinions on policies by weighing personal costs and benefits associated with the different alternatives and finally choose the one that will further their own material interests.

A large body of research shows, however, that self-interest has little apparent impact on people's political preferences. For instance, citizens with relatives and friends serving in Vietnam were not more likely to oppose the Vietnam War than others (Lau, Brown & Sears, 1978; Rugg & Cantril, 1940); white parents living in area where busing for school integration was occurring or was threatened to occur, or who had children in public schools were not more likely to oppose busing than other white adults (Gatlin, Giles & Cataldo, 1978; Sears, Hensler, & Speer, 1979; Sears, Lau, Tyler & Allen, 1980); people who were most affected by the energy crisis in 1974 were not more likely to support policies designed to redress the situation (Sears, Tyler, Citrin, & Kinder, 1978); individuals with poor health insurance were not more likely to support national health insurance than were fully insured citizens (Sears et al., 1980); unemployed individuals

were not more likely to support political programs designed to guarantee jobs and incomes (Sears et al., 1980; Lau & Heldman, 2009); victims of crime or people who feel unsafe in their living area were not more likely to favor more severe policies with respect to law and order (Sears et al., 1980); personal economic hardship does not influence neither policy preferences with respect to employment and inflation nor presidential support (Kinder & Kiewiet, 1979; Kinder & Kiewiet 1981; Lau & Sears, 1981). According to Lau and Heldman (2009) : “the conclusion seemed inescapable: narrowly defined tangible self-interest rarely has much to do with citizens' political beliefs and behavior.” (p. 515)

A couple of studies, however, have found more substantial self-interest effects. Sears and Citrin (1985) found that homeowners were more likely to favor a reduction of property tax rates in California. Green and Gerken (1989) as well as Dixon, Lowery, Levy, and Ferraro (1991) found that smokers were more likely to oppose any smoking restrictions and cigarette taxes. Similarly, Wolpert and Gimpel (1998) learned that gun-owners were more likely to oppose bans on handguns or any other gun-related restrictions.

According to Chong, Citrin, and Conley (2001), two reasons might explain the rare and modest influence of self-interest on political opinions. First, self-interest might have an impact on opinion only when the policy leads to a clear advantage for a specific group of the population, when the costs or the benefits are sizeable. In some cases, the advantage of choosing one policy alternative over the other might simply be too small. This hypothesis is supported by some recent empirical findings. Wolpert and Gimpel (1998) found that more restrictive gun regulations (e.g., banning handguns) elicited stronger self-interest effects than less restrictive ones (e.g., banning assault weapons only or imposing a waiting period on purchasers of firearms). In the same vein, Chong et al. (2001) found that people with a smaller stake in an issue are less likely to choose on the basis of self-interests. Second, the impact of self-interest on opinions might depend on the clarity of the costs and benefits. In some cases, people might simply not recognize

their own stakes in the policy proposal, either because the issue is too complicated or because individuals are not knowledgeable. For these reasons, political sophistication or issue complexity might moderate the impact of self-interest on political preferences. The impact of self-interest on opinion should be more likely among highly sophisticated individuals than among less sophisticated ones and for simple rather than complicated political issues. These hypotheses have received mixed support. On the one hand, researchers found no evidence for political sophistication to moderate the impact of self-interest on opinion (Sears et al., 1980; Lau & Heldman, 2009). On the other hand, when people were helped to identifying -or being invited to think about- their personal stakes, the relationship between self-interest and policy preferences becomes stronger (Chong et al., 2001; Sears & Lau, 1983).

2.3.2 Political predispositions

Another common model in political science holds that people's political preferences are influenced by their political predispositions. Ideology, party attachment, political values, and race are the common political predispositions (Zaller, 1992). These predispositions are said to be acquired in pre-adult years, and are supposed to persist throughout adult life, to be consistent with related attitudes and to shape citizens' attitudes on new concrete political issues. For the purpose of this dissertation, it was decided to focus only on ideology and party attachment.

2.3.2.1 Ideology

In the social sciences, ideology refers to a “configuration of ideas and attitudes in which the elements are bound together by some form of constraints or functional interdependence” (Converse, 1964, p. 206). The traditional perspective and most researchers assume a single left-right dimension (e.g. Lau & Heldman, 2009; Sears et al.,

1979; Sears et al., 1980). But the nature and number of dimensions along which ideas and attitudes are organized remains highly debated and unresolved (Conover & Feldman, 1981; Evans, Heath, & Lalljee, 1996; Fleishman, 1988; Jost, Federico, & Napier, 2009). This discussion, however, is beyond the scope of this dissertation. For more details on that, see Jost et al. (2009).

Political researchers assume that ideology facilitates political thinking and helps individuals in evaluating the policy issues. Instead of examining the ins and outs of each issue positions, citizens would simply choose the policy position that is most similar to their general ideological orientation. If this is the case, people's political attitudes and beliefs toward different policy issues should be coherently organized in accordance with their general ideological predispositions and it should be possible to predict people's policy attitudes on the basis of their ideological orientation.

Empirical evidence for such a relationship is mixed. On the one hand, a series of studies highlight a strong impact of ideological identifications on political attitudes (e.g., Holm & Robinson, 1978 ; Lau & Heldman, 2009; Miller & Shanks, 1982; Sears & Citrin, 1985; Sears et al., 1980, 1979). On the other hand, other studies clearly call into question the ability of citizens to think ideologically (Campbell, Converse, Miller, & Strokes, 1960; Converse, 1964; Jacoby, 1986; Knight, 1985; Luttbeg & Gant, 1985). For instance, the author of *The American Voter* found that ideology was not a decisive factor in voting decision (Campbell et al., 1960). Building on this early collaborative work, Converse (1964) found in his seminal work very little ideological consistency among people's attitudes on domestic or foreign policy issues. He showed that a high majority does not really and concretely know what 'being Liberal' or 'being Conservative' means, and what are the typical liberal or conservative positions on different issues. He concluded that most citizens are not very consistent in structuring their opinion according to higher ideological principles. People state they were liberal, but express conservative opinions on specific cases or the reverse. This finding was confirmed by other researchers (e.g.,

Luttbeg & Gant, 1988).

Efforts to reconcile these contradictory viewpoints led to different theoretical elaborations. First, researchers, who found that a large majority of individuals do not think in liberal-conservative terms, usually argue that political sophistication moderates the impact of ideology on political attitudes (Converse, 1964). From their point of view, only a small group of highly-sophisticated individuals are able to organize their political beliefs and attitudes consistently according to the ideological dimension. This hypothesis received some empirical support (e.g., Hamill, Lodge, and Blake, 1985; Jacoby, 1986, 1988, 1991; Judd, Krosnick & Millburn, 1981; Knight, 1985).

Second, another group of researchers argues that liberal and conservative labels have an affective connotation which is learned during early socialization. Even if respondents are not knowledgeable and cannot conceptually explain the content of the different ideological orientations, the liberal and conservative labels will trigger some affective reactions which will guide them in their voting choices (e.g., Conover & Feldman, 1981; Sears 1993; Sears et al., 1980).

Finally, some researchers also stated that the strength of the relationship between ideology and policy attitudes and the moderating effect of political sophistication might also vary across issues (Jacoby, 1991; Jost, 2006). Certain issues better reflect ideological dimensions. They are typical issues that separate liberals and conservatives; thus, the connections between ideological stands and policy positions are more widely known. Other issues are more peripheral and do not so clearly oppose liberals to conservatives.

2.3.2.2 Partisanship

Partisanship is also considered to be a political predisposition. Voters delegate the effortful search of political information and even political decisions to political elite and

simply follow the recommendations formulated by the party to whom they feel closest (Downs, 1957). This strategy allows them to avoid the difficult task of becoming knowledgeable in a wide range of political, and sometimes very complicated, issues.

A vast amount of literature has examined the relationship between citizens' party identification and their political perceptions and attitudes. The results of reports dealing with the impact of partisanship on these latter variables are mixed and the amount of support varied over time (Fiorina, 1981). The early studies observed a strong relationship between party identification and citizens' political attitudes (Belknap & Campbell, 1952; Campbell et al., 1960). These results led to the creation of the so-called Michigan model of voting behavior. According to this model, partisanship refers to an affective attachment to a political party that develops during the early socialization process, remains stable throughout life, and shapes citizens' political perceptions, attitudes, and behaviors. Partisanship was clearly considered to be an important factor influencing policy preferences.

However, during the same decade, a more pessimistic view was spreading in the scientific community. Political researchers were announcing the end of parties. As Fiorina (2002) stated: “During the 1960s and 1970s the story was the same no matter which aspect of party was at issue – it was a story of decline. 'D-words' enjoyed great popularity. Parties were deteriorating, decomposing and disappearing”(p.94). In such a perspective, partisanship was claimed to be becoming totally irrelevant and the hypothesis that it might influence people's political choices was considered to be obsolete.

Even if some actual authors perpetuate the same discourse, the wind is shifting again since the 1990s. Bartels' (2000) contention is representative of the resurgence of parties and partisanship in political studies: “[the] conventional wisdom regarding the 'decline of parties' is both exaggerated and outdated”(p. 35). Recent empirical studies have shown that partisanship was strongly related to presidential preferences (Miller, 1991,

Bartels, 2000) and to policy orientation (e.g., Jacoby, 1988; Sears et al., 1980, 1979).

Political sophistication is also supposed to moderate the impact of partisanship on perception and opinions. However, there are opposing hypotheses regarding the nature of this moderation. On one hand, some authors argue that partisanship is a shortcut principally used by those who are politically disengaged and not really interested (Kriesi, 2004). In this case, the effect of partisanship on perception and opinions is supposed to be stronger among less-informed individuals. However, other political scholars suggest that less-informed individuals will not be able to recognize the issue positions of the different parties precisely because they lack information (Zaller, 1992). Following this last perspective, partisanship should exert a stronger impact on perception and opinion among well-informed citizens. Testing both hypotheses, Bartels (2002) found no evidence for either of those propositions. The information level did not moderate the relationship between partisanship and perception of political events.

While explaining the sudden revival or partisan voting in the U.S., Bartels (2000) pointed toward an important aspect of partisan influence. He explained that the influence of party identification on political choices depends on the partisan input given by the political elite. If the political world is framed in partisan terms, citizens will be stimulated to develop and apply partisan predispositions. In contrast, if the political world is not divided along partisan lines people "will naturally have less of stimulus to think of themselves politically in partisan terms" (Wattenberg, 1996, cited in Bartels, 2000, p. 44). Thus, the impact of partisanship on political choice might vary from one issue to another as some issue might trigger more partisan discussions than others. Situations where parties clearly express their position in the media might trigger more partisan voting as it will then be easier for citizens to connect parties with issue positions and to adopt a position in accordance with their party preference.

2.3.3 Predispositions and self-interest in this dissertation

Self-interest was shown to impact policy preferences on smoking regulations (Dixon et al., 1991; Green & Gerken, 1989). Thus, it is hypothesized that:

Hypothesis 3

Self-interest variables will be related to general opinion about the smoking ban. More specifically, non-smokers will be more likely to be in favor of the smoking ban than smokers. Similarly, the more respondents feel bothered by cigarette fumes in smoky environments, the more they will be likely to be in favor of a smoking ban.

Because different opinions rely on different cognitive structures, it is further hypothesized that the impact of self-interest will be mediated by the salience of arguments and by beliefs.

Hypothesis 3a

Self-interest will be related to the salience of positive and negative considerations about the smoking ban. More specifically, non-smokers will be more likely than smokers to remember positive considerations about the smoking ban and less likely to remember negative considerations about the smoking ban. Similarly, the more people feel bothered by cigarette fumes in smoky environments the more they will be likely to remember positive considerations about the smoking ban and the less they will likely to remember negative considerations about the smoking ban.

Hypothesis 3b

Self-interest variables will be related to people's beliefs about the smoking ban. More specifically, non-smokers will be more likely than smokers to held positive beliefs about the smoking ban and less likely than smokers to held negative beliefs about the smoking ban. Similarly, the more respondents feel bothered by cigarette fumes in smoky environments the more they will be likely to held positive beliefs about the smoking ban and the less they will be likely to held negative beliefs about the smoking ban.

The literature review also underlined the importance of political predisposition in individual opinion formation. Two aspects of political predispositions were discussed: political ideology and party attachment. During the political debate about the smoking ban in Ticino, only one conservative right party (e.g., La Lega) clearly opposed the smoking ban (Boneschi, Antonietti, Tomada, Schulz, & Ehmig, 2008). The other parties never defended a clear position with respect to this issue. Thus, it is hypothesized that:

Hypothesis 4

Supporters of conservative right parties will be more likely to oppose the smoking ban than supporters of moderate right or left parties or respondents not feeling attached to any political party.

Because different opinions rely on different cognitive structures it is further hypothesized that the impact of party attachment will be mediated by the salience of arguments and by beliefs.

Hypothesis 4a

Party attachment will be related to the salience of pro and con arguments related to the smoking ban. More specifically, supporters of conservative right parties will be more likely to remember negative considerations and less likely to remember positive considerations about the smoking ban than supporters of moderate right or left parties or respondents not feeling attached to any political party.

Hypotheses 4b

Party attachment will be related to respondents' beliefs about the smoking ban. More specifically, supporters of conservative right parties will be more likely to held negative beliefs and less likely to held positive beliefs about the smoking ban than supporters of moderate right or left parties or respondents not feeling attached to any political party.

2.4 Media

As principal information providers during public debate, the media have always been considered an important source of opinion formation in public opinion research (Lazarsfeld, Berelson, & Gaudet, 1944; Mutz, 1998; Noelle-Neumann, 1993; Zaller, 1992).

Over time, different hypotheses about media effects have been presented (McQuail, 2000). Early in the 20th century, as new mass media appeared and began to spread (i.e. press, film, radio), mass media were supposed to be very powerful and to have a strong, direct, persuasive impact on people's opinions. This assumption was not, however, based on direct scientific investigations of media effect, but on the observation of their fast rise and popularization and their intrusion into daily life.

Researchers started in the mid-19th century to test empirically their hypotheses about media effects. The first empirical investigations of persuasive media effects, however, were disappointing (Lazarsfeld et al., 1944; Klapper, 1960). Media effects were not as straightforward and as evident as expected. They were even considered to be small and negligible. Following these studies, the trend then shifted from belief in strong media effects toward acceptance of minimal media effects, and for a certain period researchers lost interest in media effects research.

In the 1970s, alternative hypotheses about media effects appeared. The cognitive shift experienced in psychology inspired communication scholars, who began to look for more subtle cognitive media impacts. Media were hypothesized to influence the cognitive accessibility of certain information pieces and the strength of their impact on personal opinion. At about the same time, the spiral of silence theory emerged as one of the most important theories in the field of public opinion research. It focuses on the

perception of public opinion and assumes that the media play a central role in shaping people's perceptions of the general opinion climate. And in the 1990s Zaller's (1992) influential book reopened the discussion about persuasive media effects. This chapter will review these different theoretical approaches.

2.4.1 Persuasive media effects

2.4.1.1 From strong to limited media effects

The first empirical investigation of mass media impact on citizens' opinion is the well-known study by Lazarsfeld, Berelson, and Gaudet (1944). They aimed at examining opinion formation during a presidential campaign. One of their central hypotheses stated that the media would have a strong and direct effect on voter preferences as predicted by the hypodermic-needle model, which prevailed at that time in media research. However, to their great surprise, they found only little evidence for any persuasive media effects. Exposure to mass media was not associated with a corresponding opinion change. Mass media instead were found to activate and reinforce political predispositions, which in their study consisted of a combination of relevant individual characteristics—religion, economic status, and residence (urban or rural). Political predispositions were much more predictive of people's final opinion and vote than what they read or heard in the mass media. The early review on media effect studies conducted by Klapper (1960) confirmed Lazarsfeld's findings. Klapper concluded that the effects of the mass media ranged from small to negligible and that their major impact was to reinforce existing opinions, rather than to modify them.

2.4.1.2 Selective information processing

At that time, the prevailing explanation for the lack of persuasive media effect was

selective exposure, which assumes that individuals seek out information that is consistent with their attitudes and avoid or ignore information that is attitudinally inconsistent. Lazarsfeld (1944) put it this way: “Exposure is always selective; in other words, a positive relationship exists between people's opinions and what they choose to listen or to read”(p. 164). Berelson et al. (1954) wrote:

> “The more intensely one holds a vote position, the more likely he is to see the political environment as favorable to himself, as conforming to his own beliefs. He is less likely to perceive uncongenial and contradictory events or points of view and hence presumably less likely to revise his own original position. In this manner, perceptions can play a major role in the spiraling effect of political reinforcement” (p. 223).

Similarly, Klapper (1960) contended that “by and large, people tend to expose themselves to those mass communications which are in accord with their existing attitudes” (p. 19).

The assumption that people process new information in a way that allows them to preserve their prior beliefs and opinions is still very popular. Recently, researchers on motivated reasoning uncovered some other cognitive mechanisms that might explain the lack of media impact on beliefs and opinions (Baumeister & Newman, 1992; Gaines, Kuklinski, Quirk, Peyton and Verkuilen, 2007; Kunda, 1990; Lodge & Taber, 2000; Taber, Lodge, and Glathar, 2001). They argue that each step from initial exposure to information to final decision might be affected by “the desire to maintain prior beliefs” (Taber et al., 2001, p. 208). On the one hand, people seek out and selectively remember information and arguments that confirm their prior views. On the other hand, they avoid, selectively interpret, devalue disconfirming information or try to form counter-arguments to offset discrepant ideas.

Biased information processing is also well documented in the political context (e.g.

Fischle, 2000; Gaines et al. 2007; Lodge & Hamill, 1986; Lord, Ross, & Lepper, 1979; Shani, 2006; Taber & Lodge, 2006). For instance, Lord et al. (1979) found that supporters of and opponents to capital punishment were more critical toward scientific reports on the effectiveness of capital punishment when the report outlined results that were not congenial to their prior beliefs or behaviors.

In an experiment, Taber and Lodge (2006) examined people's reactions to arguments on affirmative action and gun control. Subjects were exposed to a set of hidden arguments that they could view by clicking on the corresponding button. Before viewing the argument, they could, however, know whether the argument was in favor or against the issue at stake as the source of each argument was mentioned, and subjects knew which sources were generally in favor versus against the issue at stake. The findings showed that people were more likely to view arguments that supported their opinion on affirmative action and gun control than those that opposed them. Moreover, congruent arguments were rated as stronger than incongruent ones. And finally, people took more time reading incongruent than congruent arguments because, as thought-listing data suggested, people were looking for arguments that could refute the incongruent evidence.

Examining the impact of the Lewinsky scandal on citizens' reactions to presidential behavior, Fischle (2000) found that prior affect for the President indelibly colored people's perceptions of the affair. Compared to Clinton's opponents, Clinton's supporters were more likely to think that the Lewinsky scandal was a conspiracy hatched by the President's opponents. They were less likely to think that he was guilty, that his behavior was damaging to the country's well-being and to his ability to perform his job correctly, and that he should resign.

Using panel data, Gaines et al. (2007) examined whether and how partisans updated their beliefs, interpretations, and opinions about the handling of the Iraq war as the number of casualties increased and the revelations that weapons of mass destruction never existed

gained credence. They showed that people update their factual beliefs accurately. In other words, they knew the number of casualties and recognized that the weapons of mass destruction were not found. However, they did not update their opinions accordingly because they adopted accommodating interpretations that allowed them to maintain their prior opinion. For instance, whereas all individuals recognized that weapons of massive destruction were not found (i.e., the factual belief was updated), partisans of neither side changed their opinions about the Iraq war. To maintain a coherent belief system, opponents of the war argued that the weapons were not found because they never existed and that Bush's administration had lied about their existence, whereas proponents of the war explained that the weapons were never found because they had been moved and/or destroyed by the enemies. The study nicely showed how people can accommodate the same fact in order to harmoniously integrate it in their belief system.

2.4.1.3 What about persuasive media effect when information is selectively processed?

The aforementioned studies showed that individuals develop a wide range of cognitive strategies that allow them to accommodate information that is inconsistent with their preconceptions. This suggests that persuasive media effects are very unlikely.

Though Zaller (1992, 1996) acknowledged that preconceptions exert a strong influence, he nevertheless argued that mass media might have a strong impact on people's beliefs and opinions. But several contextual and individual aspects need to be taken into account. At the contextual level, persuasive media impact depends on issue familiarity and on the direction of the information flow. Issue familiarity tends to decrease persuasive media effects. Indeed, when people are already familiar with the issue at stake, they already have well-established beliefs and opinions. They know the different pros and cons and have already thought about these arguments, so there is only a little

room for persuasive media effects.

With respect to the direction of the information flow, Zaller (1992) distinguished two ideal typical situations: a one-sided, consensual and a two-sided, conflictual information flow. When the information flow is one-sided and all persuasive messages on a particular policy are either favorable toward -or opposed to- this policy, the relationship between media exposure and opinion is supposed to be linear. The more people are exposed to the news coverage, the more they will be exposed to the unilateral messages and the more they will be likely to believe what is reported by the media. To give an example, if all media constantly report that the climate is warming up and that the environment is going to change in a drastic way, the more people will pay attention to the media and the more they are likely to believe what is reported by the media about global warming.

In contrast, when the information flow is two-sided and conflictual, people will be exposed to competing information, and usually those who are heavily exposed to one message are also exposed to its opposite. When the intensities of opposing messages are evenly balanced, it is, Zaller (1996) argues, almost impossible to find persuasive media effects as the media are pushing individuals in both directions at the same time. In this case, people's preconceptions might strongly shape what they believe. However, when one message is more intensively covered than the other one, then it is highly likely that some people might get only one message and not the other, and thus follow the dominant information trend. These individuals are usually those who are moderately exposed to media coverage. For instance, suppose that 80% of the media coverage asserts that the climate is warming up and only 20% gives opposing arguments. Figure 2 illustrates the expected relationship between media exposure and opinion[4]. In this case, individuals who are not exposed at all to the media coverage will get neither the dominant nor the minority message, so there is no reason to assume that they will be especially likely to endorse the dominant message. People who moderately follow media coverage will be massively exposed to the dominant message. But they are not attentive enough to get the

4 The example and the figure are purely illustrative and are not based on real data.

one that is more rarely reported by the media. Hence, they are highly likely to follow the dominant message. And finally, people who are highly exposed to media coverage are the most likely to be exposed to both messages and, as a consequence, less likely to follow the dominant one.

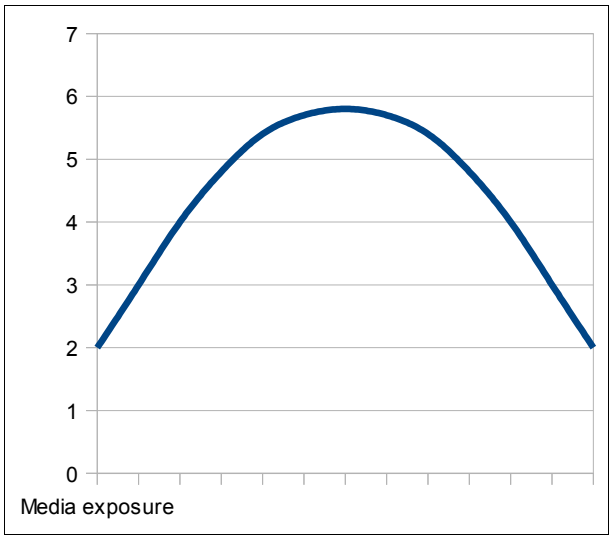

Figure 2: Non-monotonic relationship between media exposure and probability of following dominant message in the case of a two-sided, unevenly balanced information-flow

To summarize, in the case of a two-sided and evenly balanced information flow, the media is expected not to have any impact on people's beliefs and opinions. In contrast, in the case of a two-sided and unevenly balanced information-flow, the impact of media coverage on opinion formation is assumed to be non-monotonic, with most and least exposed individuals being less likely to follow the dominant message than moderately exposed ones. The form of the non-monotonic relationship is assumed to vary with the intensities of the opposing messages.

2.4.1.4 Persuasive media effects in this dissertation

According to Zaller (1992, 1996), the hypothesis related to persuasive media effect depends on the direction of the information flow and on issue familiarity. Only general hypotheses will be formulated for the moment. They will then be specified once the results of the content analyses will be presented.

Hypothesis 5a

When the information flow is one-sided, a linear relationship between media exposure on the one side and beliefs and general opinion on the other side is expected: the more respondents are exposed to media content, the more they will be likely to follow the dominant message reported by the media.

Hypothesis 5b

When the information flow is two-sided and unevenly balanced, a non-monotonic relationship between media exposure on the one side and beliefs and general opinion on the other side is expected: Least and most exposed respondents will be less likely to follow the dominant message than the moderately exposed respondents.

Hypothesis 5c

When the information flow is two-sided and evenly balanced, media exposure will not be related to beliefs and general opinion.

These general hypotheses apply as well to the impact of media exposure on general opinion as to the impact of media exposure on different underlying beliefs about the issue at stake.

The distinction Zaller (1996) makes among a one-sided, an evenly balanced, and an unevenly balanced information flow is difficult to apply in practice. It begs the question of how to delimit these different types of information-flows. How much consensus is necessary in order to consider an information flow as one-sided and consensual? Where

is the threshold between an evenly balanced and an unevenly balanced information flow? Any answer to this question would be arbitrary. In order to avoid setting any criteria, the strategy adopted in this dissertation is simply to test systematically for linear and non-monotonic relationships between media variables on the one side, and beliefs and general opinion on the other side.

2.4.2 Cognitive media effects

In the 1970s, media coverage was shown to have more subtle cognitive effects also. Three well-known models are discussed: agenda-setting, priming and framing.

The agenda-setting hypothesis assumes that, by emphasizing certain issues in their coverage, the media will influence the salience of these issues among the audience. The more an issue is covered by the media, the more likely it is that people will think about it and, as a consequence, mention it as an important national issue.

Building upon the agenda-setting hypothesis, Iyengar and Kinder (1987) added that media have a priming effect. They argued that information pieces whose salience is increased through intense media coverage will become an important dimension for subsequent political evaluations and thus will be more likely to affect people's political opinions.

Agenda-setting and priming were originally examined at the issue level. The media were supposed to influence the salience of different issues and the impact of highly covered issues on political evaluations—most of the time concerning Presidential evaluations. Recently, these hypotheses have been applied at a more micro-level (e.g., Ghanem, 1997; Kim, Scheufele, & Shanahan, 2002; Takeshita, 1997). In this case, the media are supposed to influence the salience of issue attributes. By covering certain aspects of an issue more than others, the media are supposed to increase the salience of specific issue

attributes and their impact on people's opinions about the issue. These hypotheses are known as attribute agenda-setting and attribute priming.

Finally, a last perspective, called framing, examines whether the way an issue is presented influences an individual's cognitive processes. When reporting on an event, the journalist can choose between different frames. A media frame refers to the way the journalist tells his story or, in other words, to the general storyline he selects when he is writing his article. For instance, an election campaign can be presented as a game in which candidates behave strategically in order to win (strategic frames). The same election can also be presented by focusing on candidates' political programs and the solutions they propose for the problems that the nation is facing (issue frame). Similarly, a political issue can be framed in different ways. For example, a gay rights rally can be presented in terms of a struggle for equality or in terms of a threat to moral values. Media frames are supposed to affect the way people will think about an issue by increasing the accessibility of frame-related thoughts and by strengthening the impact of frame-related thoughts on judgment.

Whereas framing is conceptually different from agenda-setting and priming[5], it also assumes that the media influence the accessibility of specific information, as well as the impact of this information on subsequent political evaluations. The following sections review the literature on these cognitive media effects.

5 Since the late 1990s, there has been a debate about how to conceptualize the cognitive effects associated with framing. Some authors have argued that framing is nothing else than attribute agenda-setting and attribute priming (Ghanem, 1997; McCombs, 1997; Weaver, McCombs, & Shaw, 2004). They assert that framing, like attribute agenda-setting, deals with the salience of issue attributes and its consequences on further cognitive processes. This point of view was however strongly criticized by other communication scholars (Price & Tewksbury, 1997; Scheufele, 2000; Scheufele & Tewksbury, 2007). Critics argued that framing deals with the activation of cognitive schemas and cannot be reduced to the activation of isolated issue attributes, as is the case in attribute agenda-setting. However, a lot of studies conducted under the framing perspective also provide strong evidence for accessibility and priming effects. We agree with the critics that framing is conceptually different from attribute agenda-setting and that it should be kept apart from agenda-setting and priming.

2.4.2.1 Media effect on accessibility of information pieces

2.4.2.1.1 Issue agenda-setting

The impact of media coverage on information salience and information accessibility has been thoroughly studied under the agenda-setting perspective. According to the agenda-setting hypothesis, the media emphasizes certain issues by devoting a greater proportion of news coverage or by placing an issue more prominently. This emphasis on issues in the media influences, in turn, the salience of these issues among the audience.

Though the agenda-setting function was already set forth by several authors (Lang & Lang, 1966; Lazarsfeld & Merton, 1948), McCombs and Shaw (1972) first tested it empirically. During an election campaign, they asked undecided respondents to outline the key issues the government should deal with. Parallel to the voter interviews, the mass media that voters were exposed to were analyzed for content. The covered items were divided into major and minor issues, depending on the space, time, and display devoted to each issue. Results were calculated at the aggregate level so that for each issue, the percentage of people mentioning it as an important issue for the government was computed. The authors found a very high correlation between the coverage intensity and the audience's judgment of what were important issues. They concluded that “the data suggest a very strong relationship between the emphasis placed on different campaign issues by the media and the judgments of voters as to the salience and importance of various campaign topics” (McCombs & Shaw, 1972, p. 181).

Following McCombs and Shaw (1972), agenda-setting studies multiplied rapidly and methodologies employed were diversified. Support for this hypothesis depends on the selected methodology. A useful typology was introduced by McCombs who proposed to categorize the huge number of agenda-setting studies along two dimensions (McCombs & Reynolds, 2002; see Table 1). The first dimension distinguishes between different levels of data aggregation (individual or aggregate level), and the second dimension

refers to the number of issues that were taken into account (one or several issues). This distinction results in a four-cell matrix, which has been labelled the Acapulco typology (McCombs & Reynolds, 2002).

Table 1: The Acapulco Typology

		Data aggregation	
		Aggregate Data	Individual Data
Number of issues	Entire coverage	Perspective 1 Competition	Perspective 2 Automaton
	Single Issue	Perspective 3 Natural History	Perspective 4 Cognitive portrait

Perspective one examines the whole range of issues covered by the media. The different issues are ranked according to how intensively and prominently they were covered. This issue ranking corresponds to the media agenda. The media agenda is then compared to the public agenda, which refers to the ranking of what people mentioned as being the most important issue the nation has to deal with. In this case, issue salience among the population is measured at the aggregate level. McCombs and Shaw's (1972) study is a typical example of this approach. In general, the competition perspective provides strong support for agenda-setting effects (Wanta & Ganhem, 2006, cited in Roessler, 2008).

Perspective two analyses the correspondence between the individual-level hierarchy of personally relevant issues and the media ranking of issues according to their coverage intensity. The entire media coverage is taken into account, and issue salience among the population is measured at individual level. Evidence for agenda-setting effects at the individual level are very scarce compared with aggregate-level research. A possible reason is that each individual seldom reproduces the entire range of issues that are covered. The importance that people accord to different issues is only loosely related to the amount of coverage of these issues (Erbring, Goldenberg, & Miller, 1980; McLeod, Becker, & Byrnes, 1974; Roessler, 1999).

Perspective three focuses on the rise and fall of the coverage intensity of a single issue over time and compares its coverage intensity with population issue salience. Only one issue is taken into account, and issue salience among the population is measured at the aggregate level. Under the longitudinal perspective, more precise hypotheses about the dynamic of agenda-setting effects are tested, like the direction of the causal relationship (Behr & Iyengar, 1985; Brosius & Kepplinger, 1990; Iyengar & Simon, 1993; McLeod, et al., 1974; Roessler, 1999;), the functional form of the media-audience agenda relationship (Neumann, 1990), or the optimal time-lag for agenda-setting effects to show up (Brosius & Kepplinger, 1990; Stone & McCombs, 1981; Wanta & Hu, 1994; Winter & Eyal, 1981).

The fourth and last perspective explores the agenda-setting effect by looking at a single issue and individual agenda. Usually, this is examined using an experimental design where the salience of a single issue for an individual is measured before and after exposure to news programs in which the amount of exposure to each issue is controlled. Experimental studies provide strong support for agenda-setting effects (e.g., Iyengar & Kinder, 1987).

2.4.2.1.2 Attribute agenda-setting

Recently, the agenda-setting hypothesis was extended to issue attributes. Just as media can select which issue to emphasize in the news coverage, they can also determine which characteristics of a single issue should be brought to light. This new perspective is known as attribute agenda-setting (Ghanem, 1997). Whereas agenda-setting deals with the salience of issues, attribute agenda-setting "deals with the specific attributes of a topic and how the agenda of attributes also influences public opinion" (Ghanem, 1997, p. 3). The more a specific issue characteristic is emphasized in the media coverage the more it is expected to be salient among the public.

For instance, different aspects were discussed during the economic crisis: the

unemployment rate, the subprime loans, executive bonuses, the responsibility of banks, and so on. Media can select which aspect to focus on. The aspects they focus on will become more salient, and people will be more likely to think about them when they have to form an opinion on the issue at stake.

Evidence for attribute agenda-setting comes from studies examining the impact of media on candidates' images during an election campaign (Becker & McCombs, 1978; Golan & Wanta, 2001; King, 1997; McCombs, Llamas, Lopez-Escobar, & Rey, 1997; McCombs, Lopez-Escobar, & Llamas, 2000; Weaver, McCombs, & Shaw, 2004). Combining content analysis and survey data, these studies compared media and public descriptions of candidates at the aggregate level. Results showed that a candidate's attributes that are most prominent in the news coverage are also the most salient ones among the audience. There is, in general, a high correspondence "between what the media convey about these candidates and what the public deemed worthy of saying about them in response to survey question" (McCombs et al., 2000, p. 85).

Attribute agenda-setting was also examined in the context of issue debate (Benton & Frazier, 1976; Craft & Wanta, 2004; Kim et al., 2002). Combining content analysis and opinion survey dealing with the commercial development of a local area, Kim et al. (2002) found that people who were highly exposed to media content were more likely to have formed an opinion about the different issue-related aspects that were addressed in the media than people who were only moderately or not at all exposed to the news coverage. Analyzing the aftermath of the terrorist attacks of September 11, Craft and Wanta (2004) found some correspondence between people's level of concern about the different consequences of September 11 and the amount of coverage attributed to these consequences in the news coverage.

2.4.2.1.3 Framing

Framing studies also provide some evidence for the impact of media on cognitive

accessibility. Initial accounts on framing assumed that exposure to a media frame will activate the corresponding cognitive frame and will, therefore, increase the accessibility of frame-related thoughts for further cognitive processing so that frame-related thoughts will be more likely to be used in subsequent thinking and judgments (Iyengar, 1991).

Most of the time, this framing hypothesis was tested in experimental designs using open-ended questions or with the thought listing procedure, in which respondents are invited to list all thoughts that come to their mind when reading an article or watching a TV transmission (Brewer, 2002; Brewer & Gross, 2005; Kiousis, Bantimaroudis, & Ban, 1999; Price, Tewksbury, & Powers, 1997; Rhee, 1997; Shen, 2004; Valentino, Beckmann, & Buhr, 2001; Valkenburg et al., 1999). Evidence for the impact of media frame on the accessibility of frame-related thoughts is very strong. For instance, when the issue of gay rights was presented as a struggle for equal rights, individuals expressed more equality-related thoughts. In contrast, when the article presented gay rights as a threat to traditional moral values, people expressed more morality-related thoughts (Brewer, 2002). Similarly, when a political campaign was described in terms of strategies and tactics that candidates use in order to win, people were more likely to think of other political campaigns in strategic terms than when the same campaign was described in terms of political problems and proposed solutions (Rhee, 1997; Valentino et al., 2001).

Recently, framing studies have been strongly criticized (Chong & Druckman, 2007; Sniderman & Thierauld, 2004). Most framing studies, the critics argue, are conducted in experimental settings and respondents are exposed to a unique frame. Yet, in reality, political actors are competing in order to impose their own frames. Different frames are circulating at the same time and people are exposed to multiple frames that appear with varying frequency. As Sniderman and Theriault (2004) formulated it:

> [...] citizens are not exposed to just one set of "metaphors, catchphrases, visual images, moral appeals, and other symbolic devices", suggesting how

> to think about the issue at hand and how to justify what should be done about it. Just so far as there is political competition over the issue, there will be public competition over which frame is most appropriate. But framing studies, to our knowledge without exception, have neglected the fact that frames are themselves contestable. They have restricted attention to situations in which citizens are artificially sequestered, restricted to hearing only one way of thinking about a political issue. But […] it is essential to consider how citizens will react when they are exposed, as in real politic they characteristically are, to opposing ways to think about an issue. (p.141)

In everyday life, the competition between different media frames can vary greatly from one situation to another (Chong & Druckman, 2007). First, the competition between two frames can be more or less asymmetric, in the sense that one frame can be more or less dominant. Second, the strength of the different competing frames can vary. Finally, the type of competition between two or more frames can change. The competition can take place between a frame and its counterframe. In this case, frame and counterframe share the same core value, the frame depicting a positive and the counterframe a negative relationship between the value and the issue at stake. For example, in the debate about the smoking ban, both opponents and proponents defended their point of view using the freedom argument. Opponents argued that a smoking ban is a violation of freedom, whereas supporters called for the freedom of non-smokers to breathe clean air. In this case, the competing frames focus on the same value. Competing frames can also differ with respect to the central value they address. Still in the context of the smoking ban, proponents framed the story in terms of health effects and opponents in terms of economic consequences.

Very few studies have examined framing effects in the context of competing media frames (Brewer, 2002; Brewer & Gross, 2005). It seems, however, that this effect depends on the type of competition. When frame and counterframe compete on the same

central value, exposure to both frames boosts frame-related thinking (Brewer & Gross, 2005). In contrast, when the frame competition involves two different frames, exposure to both frames inhibits the framing effect (Brewer, 2002). The effect of one frame on the amount of frame-related thoughts is reduced by the presence of the other frame. More evidence is, of course, needed to consolidate these conclusions.

2.4.2.2 Priming and media effect on belief importance

2.4.2.2.1 Issue priming

Iyengar and Kinder first proposed (1987) that an increase in issue salience (agenda-setting effect) further affects people's opinions and judgments. By calling attention to some issues and problems, the media define the criteria of political judgment, increasing the impact of certain beliefs on decision making.

Peter (2002, p. 22-23)[6] specified the definition and explained priming effect as following: (1) mass-mediated information that acts as prime (2) makes some information pieces available in respondent's memory temporarily more accessible. (3) The information pieces that were made more accessible are more likely to be activated and used during reception, interpretation, and evaluation of the following information than information pieces that are less accessible. In principle, these information pieces are more likely to be activated (4) the more recent (5) and the more frequent the media prime. A further condition for the activation and use of accessible information pieces is (6) the extent to which these information pieces are applicable to task that follows. The more appropriate these accessible information pieces are for the cognitive task that follows, the more likely they are to influence its outcome.

Priming effects were studied in different topics of communication sciences (Peters, 2002). In the political context, support for media priming comes from experimental

6 Originally written in German, the explanation was translated by the author of this dissertation.

studies in which participants are exposed to manipulated television or print news stories (Iyengar & Kinder, 1987; Iyengar, Kinder, Peters, & Krosnick, 1984; Iyengar, Peters, & Kinder, 1982; Miller & Krosnick, 2000; Valentino, 1999). Typically researchers manipulate exposure to one or two specific issues (e.g., crime, pollution, energy, inflation). Different groups are exposed to different issues. A post-test comparison between groups examines whether exposure to a certain issue moderates the impact of issue-related beliefs on the general presidential evaluation. Findings are in line with the priming hypothesis. Participants' foundations for their overall presidential evaluations change according to the issues that were emphasized in the news stories to which they were exposed. In other words, when people saw a TV report about crime, people's beliefs about presidential performance on security became a significant dimension when they had to evaluate general presidential performance. In contrast, when they saw a TV report on pollution, people based their evaluation of general presidential performance on his performance in dealing with environmental questions. In other words, depending on what they saw, the criteria they used to evaluate the President changed.

Since the 1990s, further evidences has come from cross-sectional and panel survey studies (Edwards, Mitchell, & Welch, 1995; Goidel, Shields & Pfeffley, 1997; Iyengar & Simon, 1993; Krosnick & Brannon, 1993; Krosnick & Kinder, 1990; Pan & Kosicki, 1997). These studies generally focus on transitional phases—for example the beginning of the Iran-Contra scandal (Krosnick & Kinder, 1990), the beginning of the Gulf crisis (Iyengar & Simon, 1993; Krosnick & Brannon, 1993) or the transition between the Gulf crisis and the recession (Goidel et al., 1997; Pan & Kosicki, 1997). It is hypothesized that these transitional phases will lead to a shift in media coverage which, in turn, will be followed by a shift in the standards that people use for judging the president. The results strongly support the priming hypothesis. Presidential performance on foreign affairs became an important criterion for general presidential evaluation in the immediate aftermath of the Iran-Contra disclosure (Krosnick & Kinder, 1990). Similarly, the media's emphasis on the Persian Gulf War in 1991 led many citizens to base their

presidential evaluations on the President's effectiveness in managing the war (Iyengar & Simon, 1993; Krosnick & Brannon, 1993; Pan & Kosicki, 1997). And when the focus of the media shifted away from the Gulf War toward the economic crisis, a similar shift in citizen's evaluation standards was found (Goidel et al., 1997; Pan & Kosicki, 1997).

Other survey studies compared people who were exposed to the media with those who were not and examined whether the evaluation standards differed between the two groups (Druckman, 2004; Hetherington, 1996; Mendelsohn, 1996; Willnat & Zhu, 1996). All studies combined content analysis and survey data analysis in the context of an election campaign. The results point toward the same conclusion. Citizens who are exposed to the campaign were more likely to base their candidate preference on aspects that were emphasized in the media than were voters who did not follow the campaign.

Studies on media priming have one major drawback: they massively focus on issue salience and presidential evaluation (McGraw & Ling, 2003). There is however no reason for limiting media priming studies to this area. As Price and Tewksbury (1997) argued “priming effects go far beyond the mere attitude formation in a presidential race” (p.197). Yet, few studies have explored other types of priming effect. Only two studies explored priming effects related to the evaluation of other political figures or groups (McGraw & Ling, 2003; Shaefer & Weimann, 2005). And for the moment the evidence is inconclusive and more research is needed.

2.4.2.2.2 Attribute priming

Media priming could also concern the impact of attribute salience on the evaluation of political issues. In the context of presidential evaluation, the media prime the evaluation criteria by emphasizing certain issues. In the context of issue evaluation, the media will prime the issue-specific evaluation criteria by emphasizing different aspects of that issue. To my knowledge, only one study explored what was labeled by the authors as “attribute priming” (Kim et al., 2002). Analyzing media content and survey data dealing with the

commercial development of a local area, Kim et al. (2002) found that issue attributes emphasized in the media became significant evaluation dimensions among the audience compared to those who were not exposed at all to newspaper coverage.

2.4.2.2.3 Framing

Priming effect was also explored in more recent framing studies. The authors of these studies suggested that media frame might also influence the importance that people attach to different considerations when they have to make a judgment.

This framing hypothesis has received some support (Brewer & Gross, 2005; Nelson, Clawson and Oxley, 1997; Nelson, Oxley and Clawson, 1997). Exposure to a specific frame increases the impact of frame-related considerations on general opinion about the issue at stake. For instance, in an experimental study, Nelson et al. (1997) exposed their participants to an article discussing welfare spending. Participants were randomly assigned either to the recipient frame or to the economic frame. Whereas the recipient frame emphasized the fact that poor people don't deserve special treatment, the economy frame stressed the possible economic consequences of excessive welfare spending. Framing effects were assessed by comparing the impact of attribution beliefs about poverty on general support for welfare policy. Exposure to recipient frame was found to strengthen the impact of attribution beliefs about poverty on general support for welfare policy.

As already discussed before (see chapter 2.4.2.1.3), framing studies lack external validity as participants are usually exposed to only one frame, whereas in reality people are usually exposed to different competing frames. To my knowledge, only one study explored the priming effect of media frames when people are exposed to competing frames. In their experiment, Brewer and Gross (2005) exposed their participants to articles dealing with school vouchers. When people are exposed to a pro-equality frame advocating that school vouchers promote equality, they draw a positive relationship

between egalitarianism and support for school vouchers. When they are exposed to an anti-equality frame that criticizes vouchers for undermining equality, the relationship is reversed. Exposure to both frames neutralized the moderating effect of the frames. When they are exposed to both (pro- and anti-equality frames) the relationship between egalitarianism and support for school vouchers parallels the result pattern found in the control group. Brewer and Gross's (2005) experiment examined a specific type of frame competition, namely the one implying a frame and its counterframe. Yet, as Chong and Druckman (2007) emphasized, the type of competition might also vary. For instance, the competition might also involve two different frames. But studies about competing frames are scarce, and much more evidence is needed to draw any conclusion.

2.4.2.3 Cognitive media effects in this dissertation

Based on the aforementioned literature review, four hypotheses related to cognitive media effects will be formulated. Only general hypotheses will be formulated for the moment. They will then be specified once the results of the content analyses will be presented.

According to the attribute agenda-setting, by emphasizing certain issue attributes, the media impacts the accessibility of these attributes among the public. It is therefore hypothesized that:

Hypothesis 6a

The issue attributes that are most prominent in media coverage will be more likely to be mentioned than the issue attributes that are less prominent in media coverage.

Hypothesis 6b

The more respondents are exposed to media coverage the more they are likely to mention those issue attributes that are most prominent in media coverage.

According to the attribute priming hypothesis, the issue attributes emphasized in the media will become significant dimensions of issue evaluation. It is therefore hypothesized that:

Hypothesis 7a

Issue attributes that are intensively covered in the media will be significantly related to people's general opinion.

Hypothesis 7b

Media exposure moderates the impact of issue attributes on opinion. The impact of issue attributes that are prominent in the media coverage will increase with media exposure.

2.5 Interpersonal communication

While the impact of mass-mediated information has triggered much interest, interpersonal communication is more rarely taken into consideration in public opinion research. However, this is surprising given that early public opinion studies underlined the importance of interpersonal communication in individual opinion formation (Lazarsfeld, Berelson, & Gaudet, 1944).

2.5.1 The impact of interpersonal communication on opinion and beliefs

2.5.1.1 Early findings

The importance of interpersonal communication for shaping individual opinion formation was acknowledged in the first public opinion study, conducted by Lazarsfeld, Berelson, and Gaudet (1944). This study focused on how people chose the candidate they would vote for and was designed to study the role of the media in decision making. The findings showed that personal influence was by far the best predictor of opinion change, far better than media exposure. Voting seemed essentially a group experience: people who worked or lived together were likely to vote for the same candidate. Family members exerted the greatest influence. Respondents who disagreed with their families experienced strong pressure that had the consequence of delaying their final vote decision and causing them to change their opinion. Moreover, when opinion change occurred, it was mostly toward the party favored by the family.

Lazarsfeld et al. (1948) also found that some individuals were more influential. Contrary to expectations, these opinion leaders were not highly educated politicians, but normal individuals who were wholly integrated into the social groups that were examined. The

opinion leaders were actually not very different from the other members of the social groups, except that they were more exposed to mass-mediated information and perceived as competent in the issue at stake by the network members, so they were a source of advice. Based on their findings, the authors of this study developed the two-step-flow hypothesis, according to which media effects proceed in two steps. Communication by the mass media first reaches massively exposed opinion leaders who filter the information before transmitting it to the community.

When reviewing the literature on personal influence existing at that time, Katz and Lazarsfeld (1955) found that social psychology had already provided striking evidence that people's beliefs and opinions were easily swayed by others. They reported for instance the well-known set of experiments conducted by Sherif (1936). Sherif asked participants to estimate how much a dot of light moved on a wall. In reality, it did not move at all. It was a visual illusion known as the autokinetic effect that gives the impression of movement. When participants were individually tested, their estimates of how far the light moved varied considerably, but when they were tested in groups, the groups converged at common estimates. Participants whose estimates differed greatly from those of the others revised them to fit the group average. This conformity had lasting effects: participants were retested individually at a later date and held to their original group-influenced estimates. Sherif saw conformity as a rational process, where people used information given by others in making judgments. When the situation is ambiguous, individuals will converge at a consensus thanks to interpersonal communication. Others' opinions will be considered valid additional information that people might integrate into their final judgment.

In another classic conformity experiment reported by Katz and Lazarsfeld (1955), Asch (1951) asked respondents to match up lines of the same length. When the task was done in isolation, all participants were correct. The task was so easy and the correct answer so obvious that it was practically impossible to make a mistake; however, when a naive

participant was the last to give an answer to the question after seven confederates had purposely chosen a similar wrong answer, one-third of naive participants conformed to the majority's wrong answer.

Katz and Lazarsfeld (1955) reported on a field study conducted in the late 1930s by Newcomb (1968) at Bennington College. Over a period of four years, Newcomb documented the evolution of political attitudes among a group of women who had just entered college. Students who were positively oriented toward and wished to integrate into the university community over time adopted the liberal views that prevailed on campus despite their strong conservative political backgrounds. Only those students who strongly identified with their families rejected the dominant political orientation of the campus. Follow-up studies of these women suggested that attitude changes attributed to the reference group persisted over time.

Thus, since the beginning of empirical investigations of public opinion, much evidence has been found that interpersonal communication and personal influence cannot be ignored when explaining individual opinion formation; however, even after this promising start, interpersonal communication is rarely examined in public opinion studies. After the famous Columbia studies, researchers were no longer interested in examining the impact of interpersonal communication on individual opinion formation. Rather, they focused principally on the two-step flow hypothesis with the objective of identifying potential opinion leaders on different issues, understanding their personality, and showing which characteristics distinguished them from those who were not opinion leaders (e.g., Brosius & Weiman, 1996; Nisbet, 2005). The focus of voting research also shifted toward the roles of values and party identification in determining voter choices (e.g., Cambpell et al., 1960; Converse, 1964).

2.5.1.2 More recent evidences

The fact that personal communication was neglected in public opinion research for decades is now deplored by prominent public opinion scholars. For instance, Glynn, Herbst, O'Keefe, and Shapiro (1999) stated, “oddly, most of the recent studies of communication influences on public opinion have left out the role of interpersonal conversation and discussion, the most common grounding for opinion development and change” (p. 409).

Only recently have public opinion and voting research regained interest in interpersonal communication. Several studies have demonstrated that political discussions with spouses, relatives, and friends influence people's beliefs and opinions about political issues (Huckfeldt, Beck, Dalton, Levine, & Morgan, 1998; Huckfeldt, Johnson, and Sprague, 2002; Huckfeldt, Sprague, and Levine; 2000; Kenny, 1994, 1998; MacKuen & Brown, 1987; Nieuwbeerta & Flap, 2000). Among these studies, a series of systematic social network studies conducted by Huckfeldt and colleagues (2000, 2002) provide interesting findings. They showed that people who held a minority point of view were often members of social networks that tended to support their position. The opinion was then considered a minority position within the larger society but a majority position within a respondent's social network. “Although such a person encounters disagreement, she receives sufficient support for her opinion to withstand the drift toward conformity” (Huckfeld et al., 2002, p. 13). Moreover, Huckfeldt et al. showed that discussion partners with a majority opinion exerted a greater influence in their social network. People were more likely to correctly identify the opinion of their discussion partners when that opinion corresponded with the majority opinion in the network, so that discussion partners who held the majority view communicated their position more effectively. This communication advantage translated into actual influence. Thus, people are more likely to be influenced by a person who holds an opinion perceived to be the majority opinion. In contrast, a person with an opinion perceived to be unpopular is less likely to influence other members of his or her network.

2.5.1.3 Identifying the source of social influence

Within a laboratory setting the "others" who have an influence on the main respondents are easily identified, but in reality, who exerts the strongest social influence on people's opinions? Do spouses, others relatives, friends, and coworkers exert the same influence?

According to social network and reference group theories, social influence is more likely among people who share a strong relationship[7] (Granovetter, 1973; Lau, 1989; Hyman, 1968; Hyman & Singer, 1968). Relationships with spouses, family members, and close friends are usually considered strong, whereas relationships with co-workers, neighbors, and acquaintances are considered weak. Empirical evidence aligns with this theoretical assumption. Lazarsfeld, Berelson, and Gaudet (1944) found that social influence was most likely among family members and friends. Disagreement within the family was found to be the most powerful cross-pressure to delay a final decision and resulted in opinion change. Similarly, social network researchers have found that network homogeneity is a feature of strong relationships (Granovetter, 1973; Huckfeldt et al., 1995). In contrast, weak relationships have been found to be a vehicle of disagreement (Granovetter, 1973; Huckfeldt et al., 1995). People who had more non-relatives in their discussion network were more likely to be exposed to divergent points of view (Huckfeldt et al, 1995). Similarly, people were most likely to encounter disagreement when they conversed with their co-workers (Mutz & Mondak, 2006).

2.5.1.4 Is network homogeneity really a consequence of social influence?

According to Lazarsfeld and colleagues (Berelson, Lazarsfeld, and McPhee, 1954; Lazarsfeld et al., 1944), the frequency of political conversation increases during a political campaign. People's personal opinions become visible, and those individuals who hold an uncommon point of view are brought into conformity within the social

7 Social network theory speaks instead of strong and weak ties ; however, because the concept of strong and weak ties is similar to that of strong and weak relationships and for reasons of clarity, it was decided to speak in terms of strong and weak relationships.

context in which they live, creating a homogeneous social environment. This logic assumes that social influence is the cause of a high degree of homogeneity; however, the direction of a causal relationship is not so easy to define.

Two individual-level processes may, indeed, explain the high level of political homogeneity so frequently reported: selection and projection effects (Huckfeldt & Sprague, 1987). Personal influence states that group preferences will shape personal attitudes, but the relationship might work in the other direction. Individuals may choose their discussants according to their preferences. “People may enforce their preferences on the context by constructing a friendship group that serves as a 'protective environment'” (Huckfeldt, 1983, p. 653). If this is the case, strong homogeneity will be the consequence of personal preferences rather than the result of personal influence. According to the reference group theory, both mechanisms might be at work: “Attitudinal similarity may be a potent factor in the formation of friendship groups, which subsequently function as powerful reference groups in inducing further attitude change” (Singer, 1981, p. 73). Huckfeldt and Sprague (1987) argue that even if people tend to purposely select their discussion partners, they are not totally free. Their choice also strongly depends on the network structure in which they live and is constrained by the availability of like-minded individuals (Huckfeldt, 1983). So, if somebody lives in a social network that is strongly in favor of a certain issue, he or she is more likely to encounter discussants who are in favor of that issue. Thus, if people can select their discussion partners according to their preferences, they also depend on the preponderance of opinions in their social context, or, stated differently, on what their social context has to offer.

Another potential source of political homogeneity is the projection effect, which is related to measurement procedure. Level of correspondence is often assessed based on respondents' self-reports. Respondents report not only their own opinions but also the opinions of their discussants, and it may happen that people misperceive other's opinions

or that they project their own opinions onto others. In this case, homogeneity in a network is only the result of a measurement artifact. In social network studies, researchers not only interview the main respondents but also the discussion partners mentioned by the main respondents, so perceived and actual support can be compared. Having made this type of comparison, Huckfeld and Sprague (1987) showed that respondents were generally quite accurate in their perceptions of discussants' preferences. Accuracy was a bit lower in a context of disagreement, but even in these cases, a majority of respondents were able to correctly recognize disagreement. Accuracy also depends on a larger social context. People are more likely to accurately perceive the opinion of a discussant if the discussant shares the same opinion as the majority of the network. If the discussant defends an opinion held only by a minority, people are then less likely to correctly perceive his or her point of view.

2.5.2 Interpersonal communication and opinion quality

A couple of recent studies explored the cognitive impact of interpersonal communication. It is generally assumed that discussion of political issues enhances quality of opinion. As Lasker (1949, cited by Kim et al., 1999, p. 366) pointed out, “our opinions can remain unformed and mutually contradictory for a long time unless a discussion or some other stimulus forces us to reconsider them.”

Conversation is indeed the opportunity to clarify what people have not understood in media reports. It is also the occasion for people to clarify their own rationale for supporting or opposing a certain point of view. When people discuss with others, they have to ground their opinion by clearly linking it to specific arguments. It is also an opportunity to enlarge one's horizon because others will rely on different arguments to defend their opinions, so people can learn new arguments on which they can later ground their own opinions. Likewise, conversation is an occasion to better understand the

rationale of people who do not share the same points of view. In many ways, interpersonal communication is supposed to have an impact at the cognitive level. But what is the empirical evidence?

Researchers have shown that talking about political issues helps make sense of the mass of information to which people are exposed (Robinson & Levy, 1986). People who discuss politics with others are more likely to develop a deeper understanding of political information and to structure a large amount of it according to the media. This aspect is especially important nowadays, as media reports have become longer, more complex, and more analytical, making it difficult for readers to organize all the information into a coherent knowledge structure that will help them form a reasoned opinion.

Only a few studies have analyzed the impact of political talk on opinion quality (Kim et al., 1999; Price et al., 2002; Cappella et al., 2002). Different dimensions of opinion quality were examined: opinionation, consistency of beliefs, argument quality, and degree of "consideredness". Opinionation refers only to the fact of having an opinion on the issue at stake. People sometimes have no idea what position to hold and respond with "I don't know" to questions. People who have no opinion either have no beliefs related to the issue or are not able to structure their belief system to position themselves with respect to the issue at stake. Kim et al. (1999) found that political conversation did not contribute much to opinionation. In other words, people who discussed politics were not more likely to have an opinion than those who did not; however, general newspaper reading was a significant predictor, so that people who read a newspaper more often were more likely to form an opinion than those who did not.

Opinion consistency has been widely discussed by Converse (1964). It refers to the coherence within a belief structure that underlies a certain position. For example, liberalism refers to a set of beliefs emphasizing, among others, individual freedom, egalitarianism, tolerance, and social change. People are inconsistent if, for example, they claim to be liberal while insisting that inequalities are natural. Empirical studies have

shown that political elites have stronger ideological consistency (Converse 1964; Jennings, 1992; in Kim et al., 1999). Their opinions are more constrained, and they have more stable sets of political preferences than the mass public. Political elites have more consistent belief systems because they are better able to organize their ideas on the issues in terms of abstract or ideological constructs. Simply stated, they know better what goes with what. As political talk is a way of clarifying one's beliefs, it should also foster development of a consistent belief system. This assumption has been confirmed by empirical studies (Kim et al., 1999; Gastil & Dillard, 1999).

Argument quality refers to the ability to provide arguments that support one's point of view. The more people are able to ground their opinion in a structure of argumentation, the higher the quality of their opinion. Kim et al. (1999) showed that general and issue-specific political conversation predicted argument quality, whereas indicators of newspaper use did not. People who frequently discussed politics or a specific issue were more likely to provide arguments to support their general opinion than people who did not.

Whereas argument quality refers to the rationale underlying personal opinion, "consideredness" describes the ability to express consideration for both sides of an issue as a way to explain why someone can be either in favor of or against a certain issue. People who are able to express consideration for both sides of an issue have a higher opinion quality in the sense that they are able not only to justify their own opinion but also to explain why someone could defend the opposite point of view. Kim et al. (1999) showed that issue-specific political discussion and general newspaper use were significant predictors of consideredness. Cappella, Price and Nir (2002; see also Price, Cappella, & Nir, 2002) found that exposure to disagreement is the specific aspect of interpersonal communication that allows discussants to enlarge their horizons. They developed a measure they called the "argument repertoire", which refers to "the number of relevant reasons for the stated opinion and the number of relevant reasons for the

opposite opinion" (Cappella et al., 2002, p. 77). The argument repertoire positively correlated with political discussion network and perceived disagreement. Respondents who benefited from a large and heterogeneous social network were better able to ground their opinions, providing not only supportive arguments but also showing understanding of the kinds of arguments that others might make in taking an opposite stand. Exposure to disagreement was positively related to the ability to generate reasons why other people might disagree with the respondent. However, it was disagreement with acquaintances and not with family members or close friends that most fostered understanding of opposite points of view.

In sum, general and issue-specific political discussion has a direct impact on the cognitive elaboration of an issue. Interpersonal communication fosters development of a coherent knowledge of the issue at stake. One's belief system becomes organized according to various alternative positions, each position being logically related to the underlying arguments that justify such a position.

2.5.3 Interpersonal communication in this dissertation

The following hypotheses draw on the aforementioned literature.

Hypothesis 8

Discussion frequency with strong supporters versus strong opponents to the smoking ban will be related to perceived support of the smoking ban. More specifically, respondents who frequently discuss the smoking ban with strong supporters of the smoking ban will be more likely to have the impression that their social environment is mostly in favour of the smoking ban than respondents who never discuss it with strong supporters of the smoking ban. Similarly, respondents who frequently discuss the smoking ban with strong opponents to the smoking ban will be more likely to have the impression that their social environment is mostly against the smoking ban than respondents who never discuss it

with strong opponents to the smoking ban.

Hypothesis 9

Perceived support within one's social environment (i.e., relatives and friends) will be related to general opinion about the smoking ban. More specifically, respondents who have the impression that their social environment is mostly in favor of the smoking ban will be more likely to be in favor of the smoking ban than respondents who have the impression that their social environment is mostly against the smoking ban.

Because different opinions rely on different cognitive structures, it is further hypothesized that the impact of perceived support on general opinion will be mediated by the salience of arguments and by beliefs.

Hypothesis 9a

Perceived support within one's social environment (i.e., relatives and friends) will be related to the salience of positive and negative considerations. More specifically, respondents who have the impression that their social environment is mostly in favor of the smoking ban will be more likely to remember positive considerations about the smoking ban and less likely to remember negative considerations about the smoking ban than respondents who have the impression that their social environment is mostly against the smoking ban.

Hypothesis 9b

Perceived support within one's social environment (i.e., relatives and friends) will be related to beliefs about the smoking ban. More specifically, respondents who have the impression that their social environment is mostly in favor of the smoking ban will be more likely to hold positive beliefs about the smoking ban and less likely to hold negative beliefs about the smoking ban than respondents who have the impression that their social environment is mostly against the smoking ban.

3. METHODOLOGY

Two kinds of data were collected in this study. People's opinions and beliefs about the smoking ban, media usage, and the nature and intensity of interpersonal communication were measured in a survey. A parallel content analysis examined the coverage of the debate on the smoking ban in the three principle Ticino newspapers. Although this dissertation will mainly focus on the survey data, it will also briefly address some aspects of the content analysis in order to predict and interpret possible media effects on individuals' opinion and beliefs.

3.1 The panel study

In total, five telephone surveys were conducted during the entire debate about the implementation of the smoking ban in Ticino. Three surveys were carried out before the referendum: The first took place in July 2005, six months after the introduction of the smoking ban in neighboring Italy; the second in October 2005, immediately after the Parliament passed the bill draft; and the third wave in March 2006, one month before the popular referendum. The last two surveys took place after the referendum: the fourth in October 2006, six months after population vote and the fifth in June 2007, two months after law came in force.

This dissertation will focus only on the second and third waves for two reasons. First, we were interested in studying individual-decision making processes before individuals have cast their own ballot. Second, waves two and three have all variables of interest, which is not the case for other waves.

3.1.1 Recruitment and Procedure

At waves two and three, a sample of, respectively, 1023 and 1031 individuals was randomly selected from the phone directory. There were 706 panel respondents. The telephone-based interviews were conducted by 16 trained bachelor and master students of the *Università della Svizzera Italiana* on work days from 5 p.m. to 9 p.m. Each interview took approximately 30 minutes to complete. For each wave, the interviewing period lasted about one month and was monitored by laboratory staff. A CATI (Computer-Assisted Telephone Interviewing) system was used to standardize interviewing.

3.1.2 Measures

The measures included in the study were as follows:

Demographic characteristics: The following demographic characteristics were measured: age, gender, level of education and nationality. As the majority of the sample was composed of Ticino inhabitants, nationality was coded into two categories: 0- Foreigner and 1- Swiss.

General Opinion: General opinion was measured by the following question: "In general, are you in favor or against the smoking ban in public places" on which respondents answered by yes or no. Favorable opinions were coded 1 while unfavorable one were coded 0.

Salience of the argument: Two open-ended questions asked first for the most salient reason against and then for the most salient reason in favor of the smoking ban: "According to you, what is the most important reason in favor (vs against) the smoking ban in public places?"

Beliefs about the smoking ban: Beliefs regarding health, economic and freedom issues were assessed by six dichotomous questions. Respondents were asked whether they expect or not the following potential consequences of a smoking ban: (1) that the health of non-smokers will improve because they are no longer forced to smoke passively, (2) that smoking will decrease generally, (3) that some smokers will stop smoking, (4) that proprietors and restaurants owners will earn lower revenues and (5) that prices in gastronomy will increase because many restaurants will have to be altered. With respect to the freedom issue, people were told that "there are two opinions on the question, if a smoking ban is a breach of personal freedom: some say yes, it is a breach of personal freedom. Other say that a smoking ban has nothing to do with freedom" and where then asked "which of these positions is closer to yours?". Answers that are consistent with a favorable attitude toward a smoking ban were coded 1[8]. Answers that are consistent with an unfavorfable attitude toward the smoking ban were coded 0.

Perceived Support: Perceived support of friends and family members was measured by the following question: "And how about your friends, relatives and colleagues: are most in favor or against a smoking ban?". There were two possible answers to this question: most are against the smoking ban (coded 0) and most are in favor (coded 1).

*Self-interest:*Smoking status and how bothered people feel in smoky environment were considered as indicators of self-interest. Respondents were asked if they smoke or not (smokers were coded as 0 and non-smokers as 1) and to indicate on a 4-point scale how strongly they agree with the following assertion: "I can never stay long in smoke-filled rooms". Scores were assigned form 1 to 4 with higher scores indicating higher levels of agreement.

Political predisposition: Respondents were asked which political party they feel close to.

8 Answers that are consistent with a favorable attitude toward the smoking ban are: (1) I expect that health of non-smokers will improve; (2) I expect that smoking will decrease generally; (3) I expect that some smokers will stop smoking; (4) I do not expect that proprietors and restaurants owners will earn less revenue; (5) I do not expect that prices in the gastronomy will increase; (6) the smoking ban has nothing to do with freedom.

Six party were proposed: Christian Democrats; Radicals; Social Democrats; Lega and the Swiss People's Party. The number of parties was reduced to three dummy coded variables which represent the main party "families" (Sciarini & Kriesi, 2003): the conservative Rights (Swiss People's Party and Lega); the moderate Right (Christian Democrats and Radical) and the Left (Social Democrats). People who mentioned more than one "family" were coded as missing. A fourth dummy variable identifies respondents who mentioned that they did not feel close to any party.

Interpersonal discussion: Two questions were designed to assess the occurrence and frequency of interpersonal discussion with opponents and supporters. Respondents were asked if they ever encountered somebody who argued strongly in favor of the smoking ban and if they ever encountered somebody who argued strongly against it. The respondents indicated the frequency of these exchanges on a 3-point scale, where 1 = never, 2 = one time and 3 = several times.

Newspaper Use: General newspaper exposure and exposure to political articles were assessed by the following standard questions: "How much time do you spend reading the newspaper on a normal week-day?" and "How much time do you spend with articles on cantonal politics?". For both questions, answers were coded in minutes.

All questions are listed in the Annex B.

3.1.3 Panel participants

The panel sample included 706 participants ages 14-88 (M=47.96 years, SD=15.5), including 229 males (32.4 %) and 477 females (67.6 %). The majority were Swiss (84.4%). The modal educational level is vocational training (36.3 %). 15.7 % had a lower educational level and 47.4 % a higher one (college, higher education, university). Frequencies and percentages for selected demographic variables are presented in Table 2.

Table 2: Frequencies of demographic variables

Categorical or dichotomous Variables	n	%
Gender		
Female	477	67.6
Male	229	32.4
Nation		
Swiss	596	84.4
Foreigner	110	15.6
Education		
No educational level	5	0.6
Primary school (legal minimum)	105	14.9
Apprenticeship or vocational school	256	36.3
High school	167	23.7
Technical college or commercial school	62	8.8
University of applied sciences	28	4.0
Research university	73	10.3
Other	0	0.0
No response	11	1.6

Continuous variable	Range	M	SD
Age	14-88	47.96	15.55

3.2 The content analysis

The content analysis covered the time period from October 2004 to May 2007. Articles were searched in the electronic archives of the newspapers agencies using the keyword "smoking ban" in Italian.

Arguments in favor and against the smoking ban were coded at the statement level. A statement was defined by its central argument in favor or against the smoking ban that is defended by one or more players. Note that a statement does not necessarily equal a sentence, as one sentence can comprise several arguments. The sample of arguments was divided into arguments in favor and arguments against the smoking ban and then regrouped further into smaller clusters: generic, moral/political, health and economic arguments. Table 3 at page 98 provides a detailed list of the arguments that were coded.

All arguments were also coded in terms of their tendency to be pro or against the smoking ban. The combination of an argument's content and tendency capture four argumentative situations:

1. The actor sustains an argument in favor of the ban (e.g., the smoking ban will improve non-smokers' health)
2. The actor sustains an argument against the smoking ban (e.g,. the smoking ban is a violation of smokers' freedom)
3. The actor refutes an argument in favor of the smoking ban (e.g., the smoking ban will not improve non-smokers' health)
4. The actor refutes an argument against the smoking ban (e.g., the smoking is not a violation of smokers' freedom).

The codebook and codesheet that were used for the content analysis can be found in Annex C. Information about intercoder reliability can be found in Fiordelli (2009, p. 59).

This dissertation will not rely on the entire content analysis. Its focus will be limited to media coverage that prevailed just before and during the investigated opinion surveys. The second opinion survey started at the beginning of October 2005 and ended on November 18th 2005. Thus, for wave 2, the newspaper content analysis covers the time period from September 1st 2005 to November 18th 2005. The third opinion survey started at the beginning of February 2006 and ended on March 10th 2006. Thus, for wave 3, the newspaper content analysis covers the time period from January 1st 2006 to March 10th 2006. The decision to take into consideration a time-frame of one month before the beginning of the opinion survey is based on findings of agenda-setting studies which suggest that the optimal time-lag for media effects to show up corresponds to about one month (Winter and Eyal, 1981; Brosius and Kepplinger, 1990; Wanta and Hu, 1994; Roessler, 2008).

Table 3: Arguments that were coded in the content analysis

ARGUMENTS IN FAVOR	ARGUMENTS AGAINST
General argument in favor	General argument against
Moral / Political arguments	Moral / Political arguments
Legal protection of non-smokers' rights	Freedom of smokers is illegitimately infringed
Reduction of molestation and harassment	Smoking ban will increase molestation and harassment
Better social relations between smokers and non-smokers	Worse social relations between smokers and non-smokers
Non-smokers are in the majority	The ban will discriminate/stigmatize smokers
The majority wants a smoking ban	
Health arguments	Health arguments
Reduction of passive smoking in general, for people working in bars and restaurants and for children	There are other solutions for reducing passive smoking
Reduction of smoking beneficial to smoker's health	
Unspecified improvement of public health	
Economic arguments	Economic arguments
Financial gains	Financial losses
Financial benefits for health system	High investments costs for places who want to adapt the architecture
Expectation of high compliance	Bad experience with earlier regulations in Switzerland
Good experience in other countries with smoking ban	National solution would be better than a regional one
Good experience with earlier regulation in Switerland	
Other specific argument in favor	Other specific argument against

3.3 Statistical analyses

3.3.1 Analysis strategy

After an evaluation of the descriptive statistics, the model was evaluated using structural equation modeling (SEM) strategies. SEM computer programs, like Mplus, use full information estimation approaches where all of the path coefficients (and their standards errors) are estimated simultaneously in the context of the full system of linear equations implied by the model. The same statistical algorithm (e.g., robust maximum likelihood estimation) is applied throughout.

An alternative approach is to use a limited information estimation strategy. This approach uses the overall path diagram to identify the structural relationships of interest and to define the relevant linear equations. However, the overall model is broken into pieces and estimates of the coefficients are derived within each piece using statistical methods that are appropriate for that piece.

Full information estimation approaches can yield more efficient estimates and more diagnostic statistics about goodness of fit (Bollen & Long, 1993; Jaccard & Guilamo-Ramos, 2002). However, the full information estimation approach also has disadvantages. For example, model misspecification in one part of the model can yield biased estimates in another part of the model (Bollen & Long, 1993). By contrast, in limited information estimation, specification error is compartmentalized. Limited information estimation also allows one to tailor the analytic method to the nature of the variables involved in a given piece of the overall model (e.g., logistic regression, multinomial regression).

Due to the complexity of our model relative to the sample size, which not only has a large number of variables but also variables that vary in nature (dichotomous, categorical and continuous variables are included in the model), a limited information approach was used. The model was divided into smaller segments and analyzed using the appropriate statistical method depending on the nature of the dependent variable. A number of preliminary analyses were undertaken within each segment. First, inter-item correlations were examined and factor analyses were conducted in order to identify potential latent variables. Then, relevant path coefficients were examined and variables that were not remotely predictive of relevant outcomes were eliminated from the model. This represents a form of preliminary theory trimming that was enacted to make the overall model more manageable. Initial segments were defined within each wave separately, and the robustness of effects and theoretical coherence of results was considered across waves as trimming decisions were made. The overall model within each wave was then fit to the wave-specific data. Modifications were undertaken in each wave separately based on model fit diagnostics (e.g., modification indices) until the fit indices showed a good model fit for both waves. Finally, both waves were merged together into an overall model and this overall model was fit to the data. It is this overall model that is of primary interest, substantively.

Some of the outcomes in a given model segment were dichotomous. Dichotomous variables can be modeled using either logistic or probit regression, log binomial regression, or the linear probability model. The linear probability model was used in conjunction with a Huber-White robust estimator (Cheung, 2007) because of its flexibility and ease of interpretation. The robust estimator ensures the standard errors are appropriate.

3.3 2 Model Fit Criteria and Evaluation

For evaluating model fit, the following indices and criteria were used in order for a model to be considered a good fit (Bollen & Long, 1993; see Table 4). The Comparative Fit Index (CFI) was examined and values of .95 or greater indicated a good model fit. The Root Mean Square Error of Approximation (RMSEA) was examined and values less than .08 indicated a good model fit. The *p* value for Close fit test was examined and values greater than .05 indicated a good model fit. Finally, the standardized RMR was examined and values less than .05 were deemed indicative of a good fitting model. The traditional chi square test of perfect fit was not relied upon because of the large sample size. In addition, more focused fit indices were examined. Modification indices of notable size (values of 10 or greater, given the large sample size) were examined to determine if there were any conceptually meaningful points of ill fit in the model. Additionally, standardized residual values were evaluated. Any values greater than two were considered points of stress in the model and sources of ill fit. For a model to be declared as a good fitting model, it had to satisfy all of the criteria, simultaneously.

Table 4: Model fit criteria

Fit indices	Criteria for good fit
CFI	>.95
RMSEA	<.08
p close	>.05
RMR	<.05
Chi Square	Not relied upon
Modification Indices	≥ 10

4. RESULTS

4.1 Preliminary analysis

4.1.1 Content analysis

The content analysis is not the main focus of this dissertation. Some results are however presented in order to give an overview of media coverage that prevailed just before and during the investigated opinion surveys, to specify the hypotheses related to media effects that were formulated only generally in the theoretical part and to guide interpretation of findings related to media effects.

4.1.1.1 Intensity of newspaper coverage

4.1.1.1.1 Intensity of media coverage – wave 2

In the time frame of September 1st 2005 to November 18th 2005, the last interview day of the second opinion survey, 93 articles were published about the smoking ban in daily Ticino newspapers (Tables 5 and 6). The majority were published in Corriere del Ticino (n=42), somewhat fewer in Giornale del Popoplo (n=26), and even fewer in La Regione (n=25). Intensity of media coverage reached a peak during the second opinion survey in October 2005. Sixty articles about the smoking ban were published during this month only. In October 2005, the number of articles per days varied from 0 to 11, the average being about 2 articles per day (M=1.94; SD=2.78).

4.1.1.1.2 Intensity of media coverage – wave 3

Between January 1st 2006 and March 10th 2006, the last interview day of the third opinion survey, 121 articles reported public discussion about the smoking ban (Tables 5 and 6). Again, most articles were published in Corriere del Ticino (n=52), fewer in Giornale del Popolo (n=38), and even fewer in La Regione (n=31). Intensity of media coverage peaked during March 2006, at the end of our third opinion survey. During the ten first days of March, 62 articles about the smoking ban were published. The number of articles per day ranged between 0 to 24, the mean being 6.2 articles per day (SD=7.47).

Table 5: Intensity and slant of general newspaper coverage

	Articles	Article per day	Article per day	Arguments	Pro Arguments
	N	Mean	SD	N	%
Before & during wave 2					
September 2005	19	0.63	1.25	168	50.0
October 2005	60	1.94	2.78	383	62.4
November 2005	14	0.78	1.31	56	73.2
Total wave 2	93	1.18	2.07	607	60.0
Before & during wave 3					
January 2006	25	0.81	1.38	147	87.7
February 2006	34	1.21	1.73	178	74.2
March 2006	62	6.20	7.45	326	73.9
Total wave 3	121	1.75	3.58	651	77.1

Table 6: Intensity and slant of newspaper coverage broken by newspaper

	Giornale del Popolo					Corriere del Ticino					La Regione				
	Art.	Art. per day		Arg.	Pro Arg.	Art.	Art. per day	Art. per day	Arg.	Pro Arg.	Art.	Art. per day		Arg.	Pro Arg.
	N	Mean	SD	N	%	N	Mean	SD	N	%	N	Mean	SD	N	%
Before & during wave 2															
September 2005	3	0.10	0.31	38	39.5	11	0.37	0.67	93	49.5	5	0.17	0.46	37	62.2
October 2005	18	0.58	0.96	105	56.2	26	0.48	1.34	172	60.5	16	0.52	0.93	106	71.7
November 2005	5	0.28	0.46	14	42.9	5	0.28	0.75	17	82.4	4	0.22	0.43	25	84.0
Total wave 2	26	0.33	0.69	157	51.0	42	0.53	1.02	282	58.2	25	0.32	0.69	168	71.4
Before & during wave 3															
January 2006	10	0.32	0.60	43	90.7	5	0.16	0.45	36	88.9	10	0.32	0.75	68	85.3
February 2006	12	0.43	0.63	70	88.6	12	0.43	0.84	58	60.3	10	0.36	0.68	50	70.0
March 2006	16	1.60	2.46	101	76.2	35	3.50	6.42	182	72.5	11	1.10	0.74	43	74.4
Total wave 3	38	0.55	1.14	214	83.2	52	0.75	2.67	276	72.1	31	0.45	0.76	161	77.6

4.1.1.2 General tendency of media coverage

4.1.1.2.1 General tendency of media coverage – wave 2

In order to determine the tendency of media coverage, the percentage of pro arguments was computed (Tables 5 and 6). One month before the beginning of the second opinion survey, media coverage was in general balanced. Exactly 50% of the coded arguments were in favor of the smoking ban and 50% against (Table 5). Then, during the second opinion survey, media coverage became increasingly positively slanted toward the smoking ban. This evolution toward a more positive coverage of the smoking ban was, however, only the case for Corriere del Ticino and La Regione (Table 6). Giornale del Popolo did not show such an evolution. Its coverage remained balanced until the end of the second opinion survey.

4.1.1.2.2 General tendency of media coverage – wave 3

One month before the beginning of the third opinion survey, media coverage was more clearly positively slanted with about 87% of the arguments being in favor of the smoking ban (Table 5). Newspaper coverage remained positively slanted during the entire survey. Moreover, the tendency of coverage revealed a large amount of consonance between the newspapers; that is, all media reported more or less in favor of the smoking ban (Table 6).

4.1.1.2.3 Hypothesis related to media effects on general opinion

Knowing the general tendency of newspaper coverage, it is now possible to specify the hypotheses related to the impact of media exposure on people's general opinion. According to Zaller (1992, 1996), the tendency of newspaper coverage determines the type of persuasive media effect. As presented in Figure 3, the general tendency of newspaper coverage varies along a continuum between a two-sided, evenly balanced

newspaper coverage on the one side and a one-sided, consensual newspaper coverage on the other side. Results of the content analysis show that the newspaper coverage at both waves was two-sided and more evenly balanced at wave 2 than at wave 3.

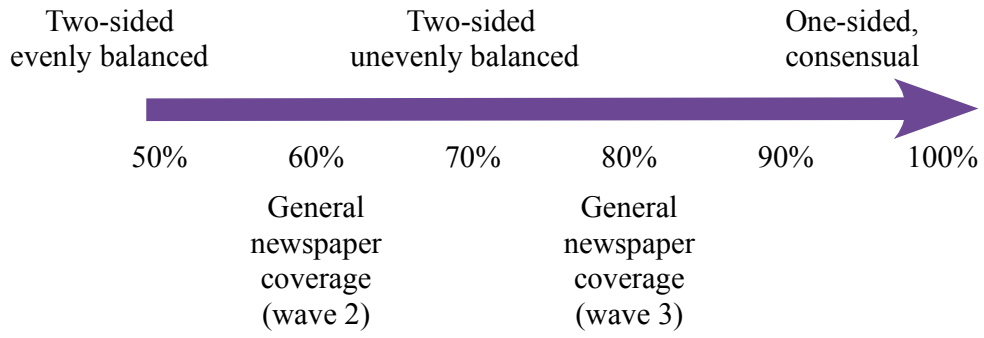

Figure 3: Direction of the information-flow at both waves

Drawing upon the literature review presented in Chapter 2.4.1 and the results of the content analysis, it is hypothesized that:

- Media exposure will be non-monotically related to general opinion

- The relationship between media exposure and general opinion is more likely to be non-significant at wave 2 than at wave 3 (because media coverage is more evenly balanced at wave 2 than at wave 3).

4.1.1.3 Media agenda of issue-attributes

4.1.1.3.1 Media agenda of issue attributes - wave 2

Tables 7 and 8 show the frequency with which each pro and con argument appeared in Ticino newspapers before and during the second opinion survey, the frequency with which they were sustained versus refuted and the number of articles that mentioned these arguments.

With respect to pro arguments, most of the statements (184 mentions in 71 articles) that were coded were unspecific statements in favor of the smoking ban; that is, they did not contain any specific argument. They only stated a favorable position toward the ban. The most frequently mentioned specific pro argument was non-smokers' health benefits related to a reduction of passive smoking. It was mentioned 42 times in 26 different articles and not really contested, as it was refuted only 3 times by opponents (7.1%). Supporters also often argued that other countries had good experiences with a smoking ban (19 mentions in 15 articles). The other pro arguments were mentioned less frequently (between 0 to 14 mentions in 0 to 10 articles).

Regarding con arguments, again most of the coded statements were unspecific statements against the ban (148 mentions in 51 articles). The most frequently mentioned specific con arguments were the smokers' freedom that is illegitimately infringed with the smoking ban and the fact that there are other, less restrictive solutions for reducing passive smoking. Both were mentioned 34 times in 22 respectively 17 different articles and were rarely contested. Financial losses that bar and restaurants owners risk was also frequently mentioned (27 mentions in 17 articles). It was however more contested than the other two popular con arguments. It was sustained in 67% and refuted in 33% of cases. The other con arguments were mentioned less frequently (0 to 8 times in 0 to 6 articles).

Table 7: Frequency of pro arguments in the newspaper coverage before and during wave 2

	Pro arguments			Articles	
	Total	Sustained	Refuted	(100% = N =93)	
	N	row %	row %	N	%
General statement in favor of the ban	184	100.0	0.0	71	76.3
Health arguments					
Reduction of passive smoking beneficial to NS	42	92.8	7.1	26	27.9
Reduction of smoking beneficial to smokers	1	0.0	100.0	1	1.1
Unspecified rimprovement of public health	10	90.0	10.0	10	10.7
Economic arguments					
Financial gains (esp. for bars and restaurants)	5	100.0	0.0	4	4.3
Financial benefits for health system	0	0.0	0.0	0	0.0
Expectation of high compliance	1	100.0	0.0	1	1.1
Good experience in other countries with SB	19	100.0	0.0	15	16.1
Good experience with earlier regulation in CH	5	80.0	0.0	5	5.4
Avant-garde role					
Moral / Political arguments					
Legal protection of non-smokers'rights	9	100.0	0.0	9	9.7
Reduction of molestation, harassment of NS	10	90.0	10.0	8	8.6
Better social relations between S and NS	0	0.0	0.0	0	0.0
Ban is justified because NS are in the majority	1	100.0	0.0	1	1.1
Ban is justified because majority wants it	14	92.1	7.1	10	10.7
Other arguments in favor	44	100.0	0.0	17	18.3
TOTAL Typical arguments in favor	345	90.3	9.7	-	-

Notes: NS = Non-smokers; S= Smokers; CH = Switzerland; SB= Smoking ban

Table 8: Frequency of con arguments in the newspaper coverage before and during wave 2

	Contra-arguments			Articles	
	Total	Sustained	Refuted	(100%= N =93)	
	N	row %	row %	N	%
General statements against the ban	148	100.0	0.0	51	54.8
Health arguments					
Other solutions for reducing passive smoking	34	91.2	8.8	20	21.5
Economic arguments					
Financial losses esp. for bar and restaurants	27	66.7	33.3	17	18.3
Investment costs for architectural adaptation	8	87.5	12.5	6	6.4
Expectation of low compliance	0	0.0	0.0	0	0.0
Bad experiences in other countries with SB	1	100.0	0.0	1	1.1
Bad experience with earlier regulation in CH	0	0.0	0.0	0	0.0
Cantonal vs federal competence	1	100.0	0.0	1	1.1
Moral / Political arguments					
Freedom of S is illegitimately infringed	34	82.4	17.6	22	23.6
SB will increase molestation, harassment	1	100.0	0.0	1	1.1
Worse social relations between S and NS	1	100.0	0.0	1	1.1
Ban will discriminate / stigmatize S	1	100.0	0.0	1	1.1
Other arguments against the ban	3	100.0	0.0	3	3.2
TOTAL Typical arguments in favor	259	92.7	7.3	-	-

Notes: NS = Non-smokers; S= Smokers; CH = Switzerland; SB= Smoking ban

4.1.1.3.2 Media agenda of issue attributes - wave 3

The same analyses for the third opinion survey are presented in Tables 9 and 10. Again, most of the statements that were coded were unspecific statements in favor of the smoking ban (149 mentions in 55 articles). The most frequently mentioned argument was the improvement of non-smokers' health due to a reduction of passive smoking (92 mentions in 49 different articles), followed by the improvement of public health in general (44 mentions in 38 different articles), reduction of harassment for non-smokers (44 mentions in 35 different articles) and the need for legal protection of non-smokers rights (43 mentions in 35 different articles). All these arguments were sustained by supporters of the smoking ban and almost never contested by opponents. Good experiences in other countries with a smoking ban was still frequently reported by the media (29 mentions in 25 different articles). The other pro arguments were mentioned less frequently (0 to 16 times in 0 to 15 different articles).

Regarding the con arguments, the most frequently mentioned argument was the violation of smokers' freedom (79 mention in 47 different articles). This argument was not only used by opponents to sustain their position against the smoking ban, it was also in 30% of the cases refuted by the supporters. Financial losses that bar and restaurant owners risk and other, less restrictive solutions for reducing passive smoking were also frequently debated (24 mentions for both in 17 respectively 20 different articles). Whereas the existence of alternatives was almost never contested by supporters of the smoking ban, the potential financial losses are highly debated. In 50% of the cases this argument was used by opponents and in 50% of the cases contested by supporters.

Table 9: Frequency of pro arguments in the newspaper coverage before and during wave 3

	Pro argument			Articles	
	Total	Sustained	Refuted	(100% = N = 121)	
	N	row %	row %	N	%
General statement in favor of the ban	149	100.0	0.0	55	45.4
Health arguments					
Reduction of passive smoking beneficial to NS	92	97.8	2.2	49	40.5
Reduction of smoking beneficial to S	8	100.0	0.0	5	4.1
Unspecified improvement of public health	44	93.2	6.8	38	31.4
Economic arguments					
Financial gains (esp. for bars and restaurants)	9	100.0	0.0	8	6.6
Financial benefits for health system	18	77.8	22.2	16	13.2
Expectation of high compliance	2	50.0	50.0	2	1.6
Good experience in other countries with SB	29	96.6	3.4	25	20.7
Good experience with earlier regulation in CH	0	-	-	0	0.0
Avant-garde role	9	100.0	0.0	7	5.8
Moral / Political arguments					
Legal protection of non-smokers'rights	43	90.7	9.3	35	28.9
Reduction of molestation, harassment of NS	44	100.0	0.0	35	28.9
Better social relations between S and NS	2	100.0	0.0	2	1.6
Ban is justified because NS are in the majority	4	75.0	25.0	3	2.5
Ban is justified because majority wants it	16	93.8	6.3	15	12.4
Other arguments in favor	11	100.0	0.0	9	7.4
TOTAL Typical arguments in favor	480	95.8	4.2	-	-

Notes: NS = Non-smokers; S= Smokers; CH = Switzerland; SB= Smoking ban

Table 10: Frequency of con arguments in the newspaper coverage before and during wave 3

	Contra-argument			Articles	
	Total	Sustained	Refuted	(100%= N = 121)	
	N	row %	row %	N	%
General statements against the ban	29	100.0	0.0	21	17.3
Health arguments					
Other solutions for reducing passive smoking	24	95.8	4.2	20	16.5
Economic arguments					
Financial losses esp. for bar and restaurants	24	45.8	54.2	17	14.0
Investment costs for architectural adaptation	0	-	-	0	0.0
Expectation of low compliance	0	-	-	0	0.0
Bad experiences in other countries with SB	1	0.0	100.0	1	0.8
Bad experience with earlier regulation in CH	1	0.0	100.0	1	0.8
Cantonal vs federal competence	0	-	-	0	0.0
Moral / Political arguments					
Freedom of smokers is illegitimately infringed	79	70.9	29.1	47	38.8
SB will increase molestation, harassment	1	100.0	0.0	1	0.8
Worse social relations between S and NS	2	100.0	0.0	2	1.6
Ban will discriminate / stigmatize S	3	100.0	0.0	3	2.5
Other arguments against the ban	7	71.4	28.6	6	4.9
TOTAL Typical arguments in favor	171	75.4	24.6	-	-

Notes: NS = Non-smokers; S= Smokers; CH = Switzerland; SB= Smoking ban

4.1.1.3.3 Hypotheses related to attribute agenda-setting and attribute-priming

In order to specify the hypotheses related to attribute agenda-setting and attribute-priming, detailed information about which attributes were most prominently covered are needed. The following list recapitulate the pro and con arguments that were most prominent in media coverage right before each opinion survey.

At wave 2, the most prominent pro arguments in the media were:

- the fact that thanks to the smoking ban, passive smoking will be reduced what is considered beneficial for non-smokers' or public health
- the fact that other countries made good experiences with a smoking ban

At wave 2, the most prominent con arguments in the media were:

- the fact that a smoking illegitimately infringes on smokers' freedom
- the fact that there are less restrictive solution for reducing passive smoking
- the fact that a smoking ban will have negative economic consequences for bar and restaurant owners.

At wave 3, the most prominent pro arguments in the media were:

- the fact that thanks to the smoking ban, passive smoking will be reduced what is considered beneficial for non-smokers' or public health
- the fact that a smoking ban will reduce harassment for non-smokers
- the fact that non-smokers need to be legally protected
- he fact that other countries made good experiences with a smoking ban

At wave 3, the most prominent con argument in the media were:

- the fact that a smoking illegitimately infringes on smokers' freedom
- the fact that there are less restrictive solution for reducing passive smoking
- the fact that a smoking ban will have negative economic consequences for bar and restaurant owners.

Attribute agenda-setting hypothesis postulates that by emphasizing certain issue attributes mass media influence the salience of these issue attributes among the public. Two hypotheses were formulated. The first posit that the issue attributes that are most prominent in media coverage will be more likely to be mentioned than the issue attributes that are less prominent in media coverage (i.e., hypothesis 6a, see chapter 2.4.3.3, p. 78). Thus, when asked to mention an argument in favor of the smoking ban, respondents will be generally more likely to mention of the listed pro argument. Similarly, when asked to mention an argument against the smoking ban, respondents will be generally more likely to mention one of listed con arguments. The second hypothesis posits that the more people are exposed to media coverage the more they will be likely to mention those attributes that are intensively covered (i.e., hypothesis 6b). Thus, the more people are exposed to media coverage the more they will be likely to mention one of the listed pro versus con argument when asked to do so.

Attribute-priming postulates that issue-attributes that are emphasized in the media will become significant evaluation dimensions. The first hypothesis posits issue attributes that are intensively covered in the media will be significantly related to people's general opinion (i.e., hypothesis 7a, see chapter 2.4.3.3, p. 78). Thus, respondents' beliefs related to the listed pro and con argument will be significantly related to their general opinion. For instance, respondents' beliefs potential health improvement, about smokers' freedom being restricted, about economic consequences for bar and restaurant owners will be significantly related to general opinion about the smoking ban. The second hypothesis posits that media exposure moderates the impact of issue attributes on opinion. The impact of issue attributes that are prominent in the media coverage will increase with media exposure (i.e., hypothesis 7b, see chapter 2.4.3.3, p. 78). Thus, the more respondents are exposed to media coverage, the stronger the relationship between the beliefs related to the intensively covered arguments and general opinion will be. For example, the more respondents are exposed to media coverage, the stronger the relationship between their beliefs about potential health improvement, about smokers'

freedom being restricted, about economic consequences for bar and restaurant owners will be.

4.1.1.3.4 Hypotheses related to the impact of media on beliefs

Knowing how much consensus there is on each argument in the media coverage, it is now possible to specify the hypotheses related to the impact of media exposure on beliefs people have with respect to the smoking ban. According to Zaller (1992, 1996), the tendency of newspaper coverage determines the type of persuasive media effects. As presented in Figure 4, the tendency of the information flow can vary from two-sided and evenly balanced on the one side to one-sided and consensual on the other side. Figure 4 presents the direction of the information flow for the most covered issue attribute. Green squares refer to pro arguments and red squares to con arguments. The position of the squares correspond to the percentage with which the argument was sustained in media coverage. This percentage is drawn from Tables 7, 8, 9 and 10. For instance, the coverage of the economic argument (i.e. bar and restaurant owner will earn less revenue) is considered as two-sided and evenly balanced at wave 3 because this argument was sustained in 45,8% and refuted in 54,2% of the cases.

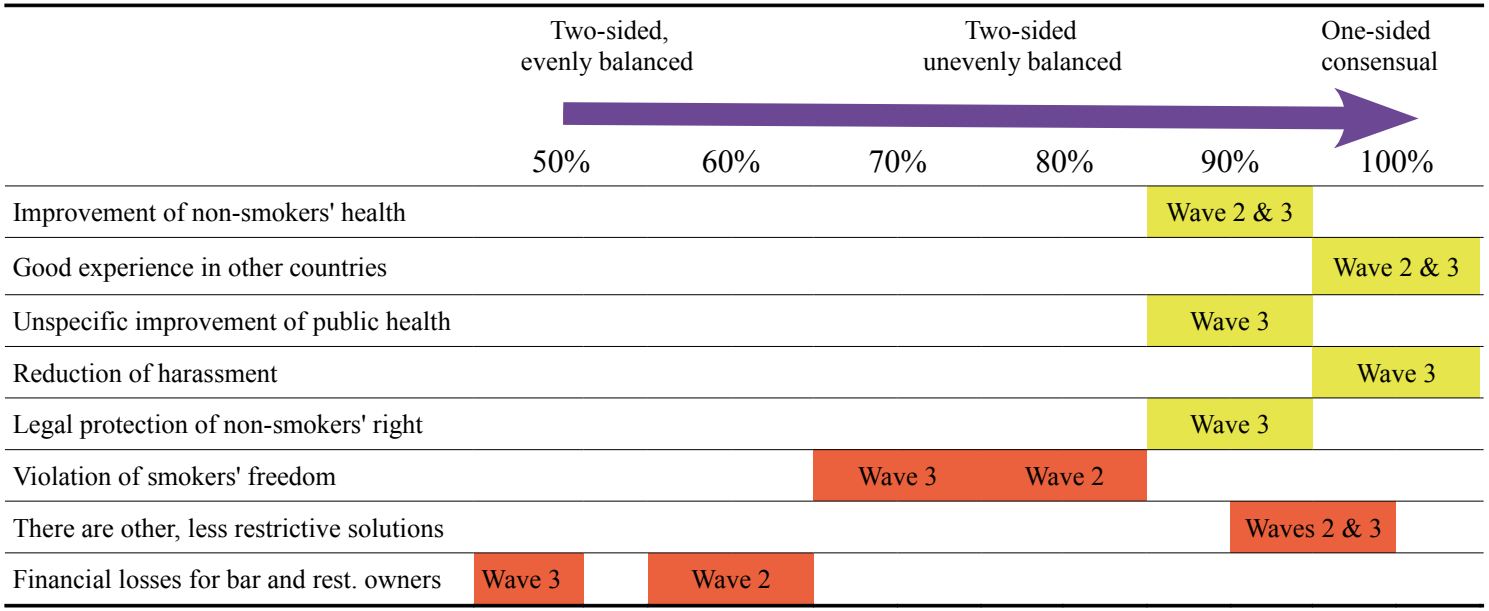

Figure 4: Direction of the information-flow at the attribute-level

Figure 4 nicely shows that the coverage of all pro arguments and of one con argument (i.e., there are other, less restrictive solutions for reducing passive smoking) is one-sided and consensual. For those arguments, it is hypothesized that:

- Media exposure will be linearly related to the corresponding belief: the more people read the newspapers, the more they will be likely to believe that what is said in the media.

For two con arguments (i.e., violation of smokers' freedom and financial losses for bar and restaurant owners), the newspaper coverage is tow-sided and either evenly or unevenly balanced. When the newspaper coverage is unevenly balanced, it is hypothesized that:

- Media exposure will be non-monotonically related to the corresponding belief.

In contrast, when the newspaper coverage is unevenly balanced, it hypothesized that:

- Media exposure will not be related to the corresponding belief.

4.1.2 Survey

4.1.2.1 Descriptive statistics

Initial analyses included the examination of frequencies for categorical and dichotomous variables (Table 11) and the calculation of means, standard deviations, skewness and kurtosis indices for continuous variables (Table 12).

Table 11: Frequencies of dichotomous and categorical variables of the model

	Wave 2		Wave 3	
Variables	%	n	%	n
GENERAL OPINION				
General opinion on smoking ban				
In favor	81.4	575	84.0	593
Against	15.6	110	12.7	90
No answer, don't know	3.0	21	3.3	23
SALIENCE				
Argument in favor				
General argument	8.5	60	8.6	61
Health	60.1	424	52.8	373
Bother	11.0	78	14.9	105
Respect	12.0	85	15.2	107
Other	8.4	59	8.5	60
Argument against				
No reason	52.7	372	37.8	267
Economy	8.4	59	4.0	28
Freedom	25.2	180	35.0	247
Other	13.7	95	22.8	161
BELIEVES				
Health of non-smokers will improve				
I don't expect it to happen	16.9	119	16.1	114
I expect it to happen	80.6	569	81.0	572
No answer, don't know	2.5	18	2.8	20
Smoking will decrease				
I don't expect it to happen	30.5	215	30.7	217
I expect it to happen	66.3	468	65.7	464
No answer, don't know	3.3	23	3.5	25
Some smokers will stop smoking				

Table 11: Frequencies of dichotomous and categorical variables of the model

	Wave 2		Wave 3	
Variables	%	n	%	n
GENERAL OPINION				
I don't expect it to happen	50.0	353	52.4	370
I expect it to happen	48.2	340	44.8	316
No answer, don't know	1.8	13	2.8	20
Bars/Restaurant proprietors will earn less revenue				
I don't expect it to happen	23.9	169	18.6	131
I expect it to happen	73.2	517	77.9	550
No answer, don't know	2.8	20	3.5	25
Price in the gastronomy will increase				
I don't expect it to happen	31.4	222	32.9	232
I expect it to happen	64.0	452	60.5	427
No answer, don't know	4.5	32	6.7	47
Smoking ban is a violation of freedom				
Yes it is a violation of freedom	37.1	262	34.4	243
No it has nothing to do with freedom	58.9	416	60.3	426
No answer, don't know	4.0	28	5.2	37
PERCEIVED SUPPORT				
Perceived support of friends				
Most are against	18.1	128	15.7	111
Most are in favor	70.7	499	72.7	513
No answer, don't know	11.2	79	11.6	82
PREDISPOSITION				
Smoking status				
Smokers	30	212	30.5	215
Non-smokers	70	494	69.5	491
Feeling bothered in smoky environment				

Table 11: Frequencies of dichotomous and categorical variables of the model

	Wave 2		Wave 3	
Variables	%	n	%	n
GENERAL OPINION				
I fully agree	67.8	459	Not repeated	
I rather agree	15.7	11		
I rather disagree	4.8	34		
I fully disagree	11.5	81		
Party attachment				
Conservative Right	6.9	49	Not repeated	
Moderate Right	20.0	141		
Left	15.2	107		
No affiliation	49.7	351		
Unclassifiable (Missings)	8.2	58		
INTERPERSONAL DISCUSSION				
Ever experienced somebody strongly against				
Yes, several times	27.8	196	36.3	256
Yes, one time	8.9	63	10.6	75
Never	62.0	438	52.7	372
No answer, I don't know	1.3	9	0.4	3
Ever experience somebody strongly in favor				
Yes, several times	48.3	341	56.9	402
Yes, one time	9.9	70	6.7	47
Never	40.8	288	36.0	254
No answer, I don't know	1.0	7	0.4	3

Table 12: Descriptive statistics for continuous variables

	Range	M	SD	Skewness	Kurtoris
MEDIA					
Both waves					
Time reading newspapers in general	0-200	25.13	0.88	2.79	12.63
Time reading political articles	0-100	7.14	0.35	3.44	21.15
Time reading newspapers in general - winsorized	0-120	24.83	0.81	2.02	5.45
Time reading political articles - winsorized	0-60	7.08	0.33	2.54	8.87

4.1.2.2 Statistical Power

To determine the appropriate sample size needed for structural equation modeling analyses, a limited information approach was used to obtain a rough approximation of statistical power. This technique uses traditional power analysis software to gain a sense of sample size demands (Jaccard & Wan, 1996). More specifically, a power analysis was conducted to estimate power for a path coefficient for a predictor that accounts for at least 5% unique variance in the outcome. Two scenarios were tested: one with the largest number of predictors that the model included in the set of linear equations implied by the model and one with a more typical number of predictors. As will be seen later, the maximum number of predictors for a linear equation was 16, but the more typical number of predictors was 10. So the number of predictors was fixed one time at 16 and another time at 10. A squared population multiple correlation of 0.20, a 0.05 alpha level, and a two-tailed test were assumed. The sample size of 706 yielded power of .99 for linear models having either 16 or 10 predictors.

As the majority of the endogenous variables are dichotomous, the power analysis was

replicated in the context of logistic regression, which is conservative relative to the linear probability modeling strategy used in the analyses. For a logistic regression analysis where the target predictor is a non-continuous predictor with a maximum of 15 other non-continuous predictors in the equation, where the event rate at the mean of all predictors is 0.10 and where the multiple correlation of the predictors with the other predictors is 0.30, a sample size of 706 yielded a power estimate of .92.

The power analyses showed that a sample size of 706 yielded satisfactory power for the proposed analyses.

4.1.2.3 Outliers

Each continuous variable was evaluated for outliers by examining its frequency distribution at the univariate level and identifying scenarios where extreme scores occurred for a small number of respondents. Only media variables are continuous: time people spend reading newspapers in general, time they spend reading political articles and the information indexes coming from the merging process. Based on inspection of the frequency distributions, it was decided to winsorize the time people spend reading newspaper in general to 120 minutes and the time people spend reading political articles to 60 minutes. Otherwise, a few very extreme scores could impart undue influence on the results. In total, 0,43% of the scores on reading newspapers were winsorized and 0,15% of the scores on time people spend reading political articles were winsorized.

Multivariate outlier analysis was then pursued using model based and non-model based techniques. For the latter, leverage indices were examined for each participant based on their multivariate profile for the variables included in the model. The mean leverage score across participants was .05 and outliers were defined as a leverage score four times greater than the mean leverage. 19 outliers were identified using this criterion. Model based outliers were examined using limited information ordinary least squares (OLS) regression analyses for each of the linear equations implied by the overall model. Each

endogenous variable was regressed onto the indicators of the exogenous variables predicting them. Standardized DfBeta coefficients were examined for each individual, predictor and intercept. Outliers were defined as a participant with a given absolute standardized DfBeta coefficient larger than 1.0. Based on these criteria, no outliers were evident in the sample data.

Despite the presence of non-model based outliers, it was decided to pursue the analysis without any further outlier specific intervention, the potential impact of these outliers being minimized by the large sample size.

4.1.2.4 Non-normality

Univariate normality was assessed for each continuous variable using skewness and kurtosis indices (*Table 12*). Whereas skewness values were all within or close to the acceptable range, troublesome kurtosis values were found for almost both continuous variables in the model. Time people spend reading newspapers in general and time people spend reading political articles had a kurtosis value of respectively 12 and 21. After winsorization, kurtosis values became closer to an acceptable range (respectively 5 and 8) but still pointed toward non-normality. In order to deal with the observed non-normality, we used a robust maximum likelihood estimator based on the Huber-White robust estimator (Cheung, 2007) as implemented in Mplus.

4.1.2.5 Missing Data

Two types of missing data analyses were conducted. The first analysis assessed the dropout rate between waves 2 and 3 and related potential biases, and the second analysis examined missing data biases within each wave.

Attrition rate between waves was about 30%. Dropout bias was assessed by forming a dummy coded variable at the initial assessment reflecting the participation or not in the

following wave. This dummy variable was then correlated with all variables in the model measured in the preceding wave as well as an array of demographic variables. Most of the associations were statistically non-significant and the few that were showed a weak effect size. We found for instance that respondents who dropped out of the study were on average about 3 years older than panel participants ($t_{(1019)}$=3.064, p> .05), that they spend on average less time —about 1,5 minutes─ reading political articles ($t_{(961)}$=-2.117, p>.05) and that they were less likely to have strong supporters among their discussion partners (VCramer=.091, p<.05). It can be concluded that panel participants do not significantly differ from non-panel respondents. Analyses focused only on participants who participated in both waves (N=706).

At wave two, variables in the model had, on average, 2.54% (SD=3.08) missing data. The maximum was 11.2% for perceived support of friends. For the other variables, the amount of missing data ranged between 0% and 8.2%. At wave three, the average amount of missing data per variable was 2.64% (SD=3.25). Again, the maximum amount of missing data was perceived support of friends (11.6%). For the other variables, the amount of missing data ranged between 0% and 8%. When both waves are taken into consideration, only 53.3% of the panel had complete data. So, about half of the respondents present at least one missing data point at one of both waves. The number of missing values per respondent ranged from 0 to 6. The majority of those with missing data (25.5%) showed only one missing value, two respondents had 5 missing values and three respondents had 6 missing values. Given the large number of variables, missing data bias was assessed only for the three most central variables: general opinion at wave 2, general opinion at wave 3 and smoking status. For the variables related to general opinion, two dummy coded variables were created indicating the presence or absence of missing data on these variables. These dummy variables were then correlated to all other variables in the model and a range of demographic variables. With respect to the smoking status, the focus of the analyses was to assess if the presence of missingness in other variables depended on the smoking status. In this case, a dummy variable was

computed for all variables in the model reflecting the presence or absence of missing data. Smoking status was then correlated with all dummy variables. In general, all correlations were statistically non-significant and in the few cases where the correlations were significant, their magnitude was low and could safely be ignored. For this study, missing data were dealt with using full information maximum likelihood (FIML) methods as implemented in M Plus (Allison, 2003). This method is reasonably robust to violations of non-normality, at least as well as any alternative.

4.1.2.6 Exploring measurement structure

Measurement structure for the variables was explored in both waves separately in order to examine whether the results replicated across time. The model was divided into smaller segments and preliminary analyses focused on inter-item correlations and factor analyses.

Salience of the argument

Two open-ended questions asked first for the most salient reason against and then for the most salient reason in favor of the smoking ban. Respondents' answers were coded using a coding scheme that was developed after a first examination of all answers given by the respondents. Responses to the most salient reason in favor of the smoking ban was divided and coded into one of five categories. (1) *general argument in favor of the smoking ban.* This category includes unspecific answers like “it is for non-smokers” or “it is against passive smoking”. (2) *Health.* This category reflects all health arguments like “it is good for public health” or “passive smoking is damaging”. (3) *Bother.* Many respondents also welcomed a smoking ban because they felt bothered in smoky environments, because they find that smoke smells bad, or because they want to eat or drink something without being annoyed by others' smoke. (4) *Respect.* Respondents also often mentioned the lack of respect that smokers show towards non-smokers and the need to introduce a ban to restore respect toward non-smokers. (5) *Other.* All other

specific arguments were coded in this category. Four categories were used to code the most salient argument against the smoking ban. (1) *No reason*. Most respondents were not able to give any argument against or stated clearly that there is no reason against the smoking ban. (2) *Economy*. Some people mentioned the economy in general without going into details. Other were more specific and mentioned the economic impact for bar and restaurant owners and the high investment that it would represent for owner if they have to restructure their rooms (e.g., build a separate room for smokers) in order to reduce exposure to passive smoking. All these answers were grouped into one category. (3) *Freedom*. Some respondents mentioned freedom in general without any specification. Others clearly stated that the smoking ban would violate smokers' freedom. (4) *Other*. All other specific arguments were grouped into this miscellaneous category. Frequencies of all categories are presented in Table 11 at page 119.

Beliefs about the smoking ban

Beliefs and expectations regarding health, economic and freedom issues were assessed by six dichotomous variables. In order to explore the possibility of forming a latent variable underlying them, an three factor confirmatory factor analysis was conducted in AMOS using phi coefficients as the basis for the factor analysis. The three health variables were set to load on one factor, the two economic variables on another factor, and finally the freedom variable was a unique indicator of the third and last latent variable. Both waves were tested simultaneously and all latent variables were allowed to correlate with each other. All the model fit indices showed poor fit. Examination of the correlations between the variables showed that the correlations among all of them were weak to moderate (Table 13 for wave 2 and table 14 for wave 3). Given that beliefs related variables were weakly to moderately related with each other, it was decided to treat them separately in the model and forgo the use of latent variables .

Table 13: Inter-item correlations for dichotomous or categorical variables – wave 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
BELIEFES															
1. Non-Smokers Health	--														
2. Smoking will decrease	.13**	--													
3. Smokers will stop smoking	.08*	.43**	--												
4. Owners will earn lower revenues	.22**	.06	.05	--											
5. Prices will increase	.04	.01	.05	.34**	--										
6. Smoking is a violation of freedom	.28**	.09	.07	.31**	.17**	--									
SALIENCE															
7. Salience con arguments	.12*	.07	.07	.15*	.14*	.23*	--								
8. Salience pro arguments	.15*	.11	.08	.13*	.08	.15*	.08	--							
PERCEIVED SUPPORT															
9. Support of friends	.26**	.15**	.04	.31**	.18**	.23**	.14*	.09	--						
SELF-INTEREST															
10. Smoking status	.24**	.02	.09*	.31**	.20**	.25**	.20**	.13*	.27**	--					
11. Feeling bothered	.22**	.09	.03	.22**	.09	.30**	.08	.08	.23**	.27**	--				
POLITICAL PREDISPOSITION															
12. Party attachment	.11	.07	.06	.14*	.16*	.13*	.07	.11*	.06	.08	.06	--			
INTERPERSONAL DISCUSSION															
13. Disc. Frequency with opponent	.11*	.02	.02	.06	.02	.06	.07	.08	.10*	.07	.06	.08	--		
14. Disc. Frequency with supporter	.13**	.02	.04	.08	.05	.12*	.08	.04	.15*	.07	.09	.11*	.31**	--	
GENERAL OPINION	.41**	.17**	.09*	.37**	.13*	.37**	.23**	.08	.47**	.37**	.30**	.06	.06	.17**	--

* p < .05; ** p < .001; black values are Phi and blue values are VCramer

Table 14: Inter-item correlations for dichotomous or categorical variables – wave 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
BELIEFES															
1. Non-Smokers Health	--														
2. Smoking will decrease	.25**	--													
3. Smokers will stop smoking	.12*	.33**	--												
4. Owners will earn lower revenues	.22**	.12*	.10*	--											
5. Prices will increase	.05	.07	.06	.26**	--										
6. Smoking is a violation of freedom	.28**	.08*	-.01	.26**	.08	--									
SALIENCE															
7. Salience con arguments	.16*	.08	.06	.16**	.13*	.25**	--								
8. Salience pro arguments	.16*	.08	.07	.06	.08	.05	.08	--							
PERCEIVED SUPPORT															
9. Support of friends	.26**	.15**	.04	.24**	.16**	.22**	.11*	.10	--						
SELF-INTEREST															
10. Smoking status	.25**	.09*	.03	.26**	.15**	.27**	.18**	.12*	.19**	--					
11. Feeling bothered	.15*	.09	.04	.16**	.03	.23**	.10*	.05	.18**	.24**	--				
POLITICAL PREDISPOSITION															
12. Party attachment	.06	.08	.06	.10	.10	.03	.06	.07	.08	.08	.06	--			
INTERPERSONAL DISCUSSION															
13. Disc. Frequency with opponent	.06	.03	.06	.10*	.09	.06	.10*	.10	.09	.05	.12	.14**	--		
14. Disc. Frequency with supporter	.11*	.12*	.03	.08	.08	.06	.04	.08	.12*	.03	.08	.10	.17**	--	
GENERAL OPINION	.38**	.14**	.03	.25**	.08*	.39**	.26**	.08	.49**	.28**	.20**	.04	.60	.08	--

* p < .05; ** p < .001; black values are Phi and blue values are VCramer

Self-interest and political predisposition

As smoking status and feelings in smoky environments were only moderately correlated, it was decided to treat them separately for the analyses (Table 13 for wave 2 and table 14 for wave 3). Whereas feelings in smoky environments was asked only at wave 2, smoking status was asked at both waves and, as suspected, the within-subject correlation between wave 2 and 3 was very high ($r = 0.85$), so that it was decided to use only the observed indicator of smoking at wave 2. Party attachment was asked only at wave 2 by a unique question and is unrelated to smoking status and feelings in smoky environment.

Interpersonal discussion

Two categorical variables assess the frequency of interpersonal discussion with opponents to versus supporters of the smoking ban. As they correlated only moderately, it was decided to treat them separately in the final model (Table 13 for wave 2 and Table 14 for wave 3).

Media

Two indicators of newspaper use were available in the survey: the time people spend reading newspapers in general and the time they spend reading political articles. These measures were moderately to strongly correlated (Table 13 for wave 2 and table 14 for wave 3). It was however decided not to combine them into a composite variable but to first explore their differential impact on endogeneous variables in the preliminary analyses. As their correlation might lead to multicolinearity problems, all regressions involving media variables will be conducted separately, a first time with the time people spend reading newspapers in general and a second time with the time people spend reading political articles.

4.1.2.7 Exploring relevant path coefficients and initial trimming

Relevant path coefficients were explored on a preliminary basis by regressing each endogeneous variable onto each set of predictors implied by the general model separately, the first time at wave two and a second time at wave three. Predictors that did not show any statistically significant effect at either wave were trimmed from the final model.

Beliefs about the smoking ban

General opinion was regressed onto all beliefs using logistic regression. Results showed that the following beliefs were associated significantly with general opinion vis-à-vis their regression coefficients (Table 15, p.189): health of non-smokers will improve, smoking will generally decrease, proprietors and restaurant owners will earn less revenue, smoking ban is a violation of freedom. Beliefs that smoking will decrease and that prices will increase did not show any statistically significant coefficients and were therefore dropped from the final model.

Salience

General opinion was regressed onto salient arguments in favor and against, a first time at wave 2 and a second time at wave 3 using logistic regression. Logistic regression was used as a screen in favor of the linear probability model approach in the main modeling effort so as to subject tests of predictability to sensitivity analyses using two distinct modeling algorithms. Only predictors that show effects across both forms of analysis are interpreted with some degree of confidence. The salience of arguments in favor of the ban comprise five dummy variables (of which four were entered into the estimating equation) and the salience of argument against the ban four (of which three were entered into the estimating equation). The omitted dummy variable defined the reference category. The reference category for both variables was changed several times in order to obtain all possible contrasts. In Table 16 (p. 190) the reference category was “other” for model 1, “passive smoking” for model 2, “respect” for model 3 and “bother” for model

4. The same logic applies for the argument against. Results show that the salient argument in favor of the ban is not related to general opinion (Table 16, p.190), whereas salient argument against the ban is (Table 17, p.191). It was decided to keep only salient argument against the smoking ban in the final model.

Perceived Support

Proximal endogenous variables (Salience and Beliefs) that were significantly associated with general opinion and general opinion itself were regressed onto perceived support using logistic or multinomial logistic regression (Tables 18, 19 and 20, pp.192-194). Results show that perceived support significantly impact all beliefs, salience of con arguments and general opinion. It was therefore included in the final model.

Predisposition

Proximal endogenous variables (Salience and Beliefs) that were significantly associated with general opinion and general opinion itself were regressed onto predisposition's variables using logistic or multinomial logistic regression. Results show that smoking status, the feeling people have in smoky environment as well as party attachment yielded statistically significant coefficients in predicting the different endogeneous variables (Tables 21-27, pp.195-201). Thus, all variables were included in the final model.

Interpersonal Discussion

Perceived support was regressed onto discussion frequency with opponents and discussion frequency with supporters. Results show that both yielded statistically significant coefficients in predicting perceived support (Table 28, p.202). Thus, they were both included in the final model.

Media

Three different types of analyses were conducted. First, direct effects were explored by regressing proximal endogenous variables (Salience and Beliefs) that were significantly associated with the general opinion and the general opinion itself onto media variables

using logistic regression or multinomial logistic regression. As time people spend reading newspapers in general correlates moderately to strongly with the time they spend reading political articles, separate regressions were conducted each time for both indicators of media exposure. Results showed that the time people spend reading newspapers in general was not associated significantly with any endogenous variable, whereas time people spend reading political articles was in some cases (Tables 29-42, pp. 203-212). Second, potential quadratic effects between media variables on one side and beliefs and general opinion on the other side were examined. None of the quadratic estimates were significant (Tables 43-54, pp. 213-220). Finally, interaction terms between media exposure and each belief were examined, in order to assess whether media exposure moderates the impact of beliefs on general opinion. Results show that none of the interaction terms were significant (Table 55 and 56, pp. 221 and 222). Based on the aforementioned analyses it was decided to drop the variable reporting the time people spend reading newspapers in general from the final model as it was not significantly related to any of the endogeneous variable. Only the time people spend reading political articles remained in the final model. Moreover, neither interaction nor quadratic terms will be included in the model.

4.1.2.8 Fitting the model for both waves separately

In a final preliminary step, the overall model was fit for both waves, separately. Full information estimation was not possible because the model includes a nominal level mediator, namely the salience of arguments. As illustrated by Figure 5, a nominal variable as mediator necessitates two different representations of the nominal variable, which is not possible in current SEM software. Because of this limitation, analyses were pursued using limited information estimation approach with two submodels, one using the salience of arguments as an outcome and the other as an exogenous variable.

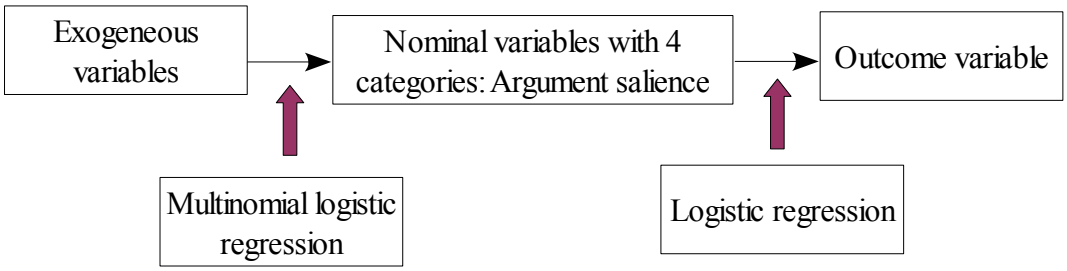

Figure 5: Combination of multinomial and logistic regression

Figure 6 shows the model that was fit in both waves separately using robust maximum likelihood based on the Huber-White robust estimator. Red arrows represents the part of the model that was tested separately.

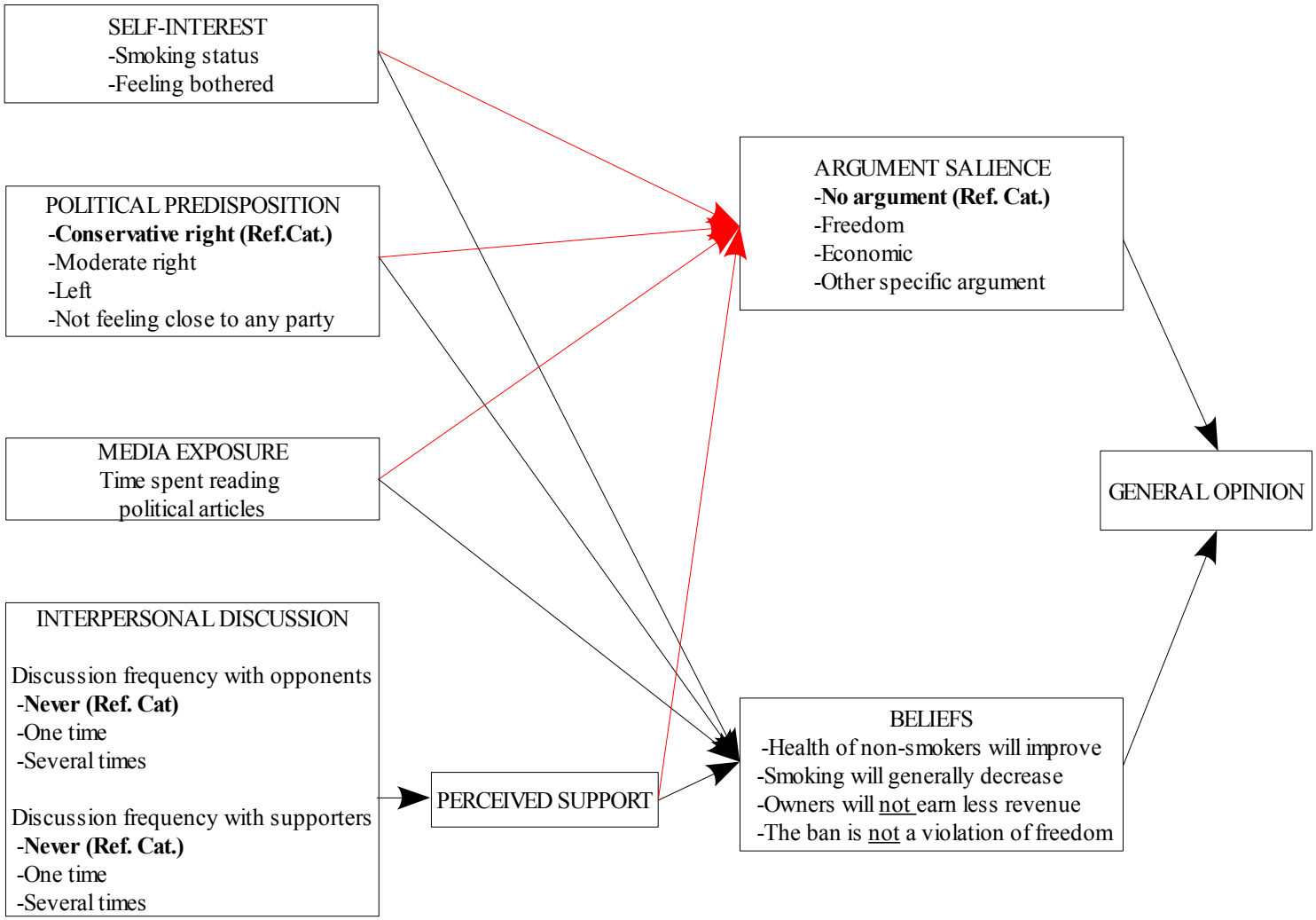

Figure 6: Model that was fit in both waves separately

The traditional global fit indices for this model did not provide a good fit and this was the case in both waves. After reviewing model diagnostics, modification indices suggested several sources of ill fit. The first source of ill fit was between general opinion and smoking status and between general opinion and perceived support. In these cases, modification indices pointed toward a direct relationship. The second source of ill fit was between self-interest variables (e.g., smoking status and feeling bothered in smoky environment) and perceived support. In this case, modification indices indicated to relate these variables. A third source of ill fit was between the four beliefs. Modification indices indicated that they should be related. And finally, some modification indices pointed toward reversed relationship for instance between general opinion and perceived support. Careful thought was given to the conceptual rationale for these sources of ill fit and what would be the most theoretically sound strategy for correcting them. It was decided not to reverse any relationship. All other proposed modifications sounded reasonable and replicated in both waves. It was therefore decided to change the model accordingly. Thus, a causal relationship between self-interest variables (e.g., smoking status and feeling bothered in smoky environment) and perceived support of friends was added. Moreover, perceived support and smoking status were related to general opinion and finally the residuals for all beliefs were correlated. This was done in both waves.

This revised model was re-fit to the data, which yielded a good model fit in both waves. For wave 2, The Comparative Fit Index (CFI) was .995. The Root Mean Square Error (RMSEA) was .04, the *p* value Close fit test was .85 and the standardized RMR was .02. For wave 3, The Comparative Fit Index (CFI) was .96. The Root Mean Square Error (RMSEA) was .04 and the *p* value Close fit test was .93 and the standardized RMR was 02. In addition, more focused fit indices were examined. There were no modification indices of any consequence or notable size. Also, no offending estimates were evident. Additionally, most standardized residual values were less than two. These focused fit indices all suggested a satisfactory model fit.

4.2 Primary analysis

In the final step, both waves were merged together and the overall model was fit, using robust maximum likelihood. Again, multinomial logistic regressions were conducted separately in the context of the limited information analyses dictated by the SEM software.

The traditional global fit indices for this model did not provide a good fit. After reviewing model diagnostics, modification indices suggested two source of ill fit. Both were related to salience of freedom argument and freedom beliefs. First, modification indices indicated that salience of freedom argument and freedom belief should be related at each wave. Second, they suggested to relate salience of freedom argument at wave 2 with freedom belief at wave 3. The proposed modification were theoretically defensible and were therefore integrated in the model.

This revised model was re-fit to the data, which yielded a good fit. The Comparative Fit Index (CFI) was .954. The Root Mean Square Error (RMSEA) was .027 and the *p* value Close fit test was 1.00 and the standardized RMR was .027. In addition, more focused fit indices were examined. There were no modification indices of any consequence or notable size. Also, no offending estimates were evident. Additionally, most standardized residual values were less than two. These focused fit indices all suggested a satisfactory model fit.

Figure 7 and Figure 8 present the results of the model. Rectangles represent observed (measured) variables. Blue rectangles refer to variables measured at wave 2 and green ones to variables measured at wave 3. The straight lines with arrows represent the presumed causal pathways. The values along the pathways are path coefficients. Only significant pathways are shown in the model. Red path coefficients refer to the results of the multinomial logistic regression which was conducted separately.

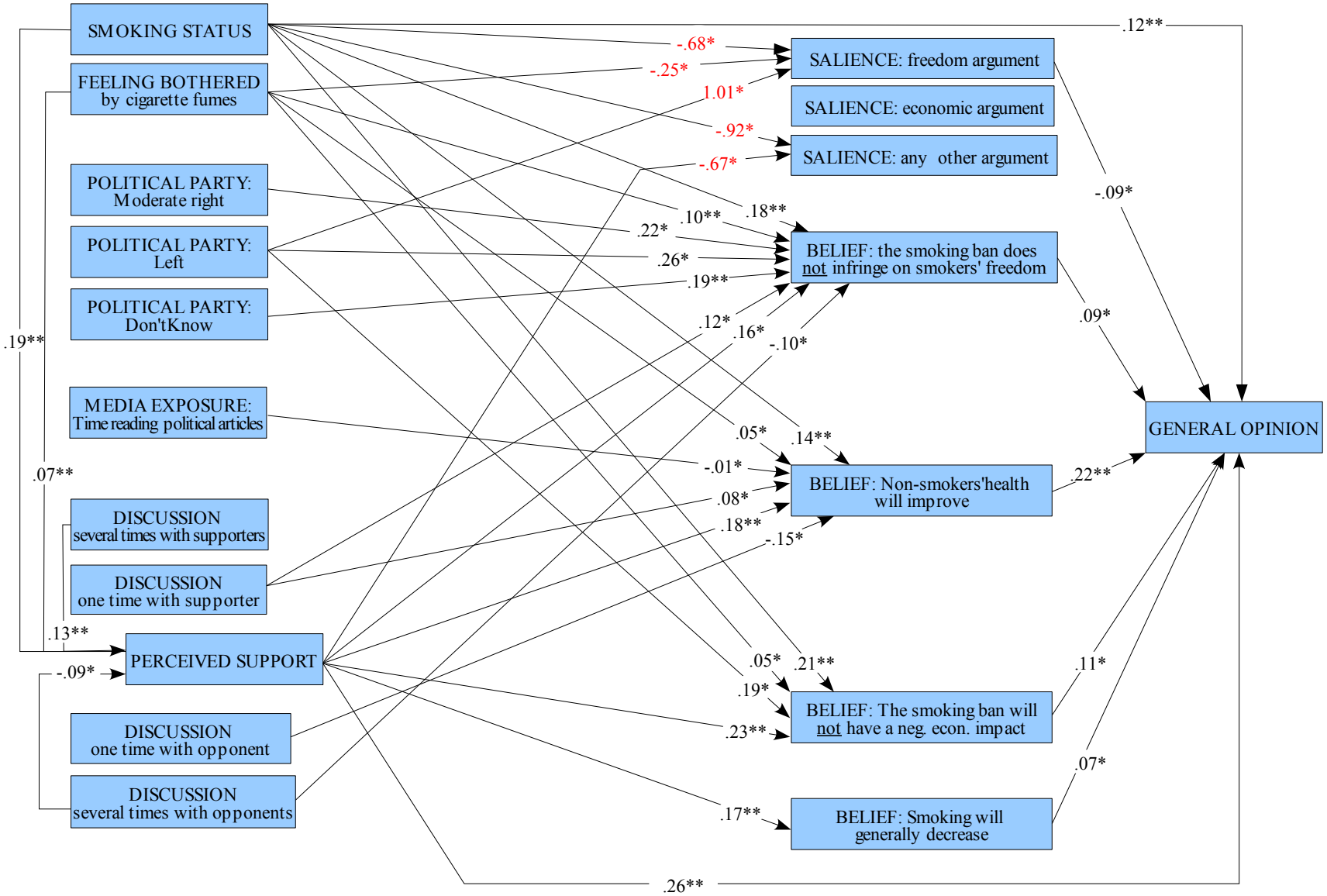

Figure 7: Final SEM model for wave 2

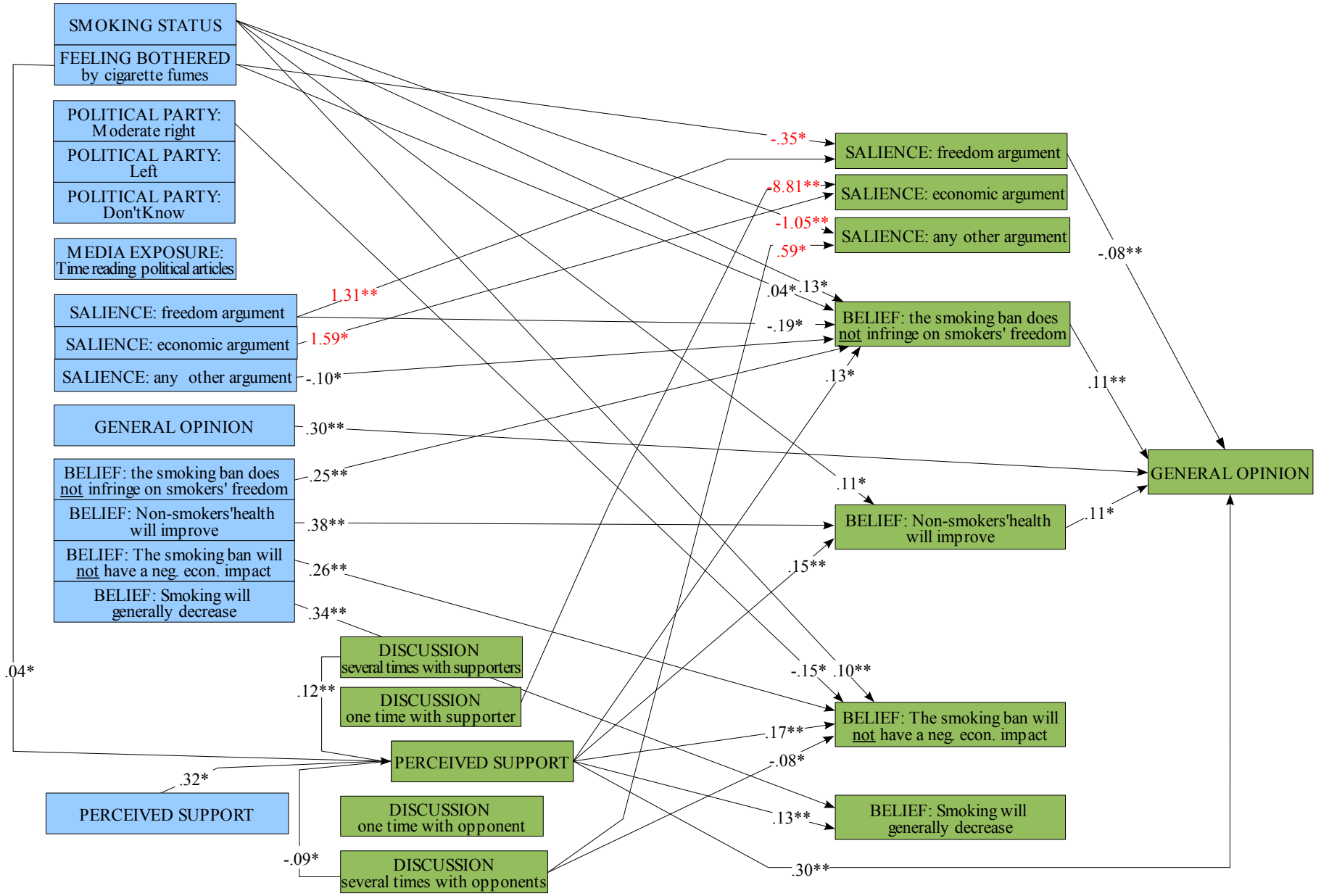

Figure 8: Final SEM Model for wave 3

All unstandardized path coefficients, standard errors and 95% confidence intervals are listed in Table 57 at page 223. Unstandardized estimates of the multinomial logistic regression, odd ratios and 95% confidence intervals are presented in Table 58 at page 225. The following is a description of the results organized by research hypotheses.

4.2.1 What impacts general opinion

4.2.1.1 Argument Salience

It was hypothesized that the salience of arguments in favor (i.e., pro arguments) versus against (i.e., con arguments) the smoking ban would be related to the general opinion about the smoking ban. More specifically, it was expected that respondents who were able to remember pro arguments would be more likely to be in favor of the smoking ban than those who were not able to remember any pro arguments. Similarly, it was expected that respondents who were able to remember con arguments about the smoking ban would be more likely to be against the smoking ban than those who could not remember any con arguments.

This hypothesis received mixed support. The salience of pro arguments was not significantly related to general opinion. More specifically, all respondents were able to mention at least one argument in favor of the smoking ban and the type of pro argument they mentioned was not significantly related to general opinion. In contrast, not all respondents were able to mention an argument against the smoking ban. However, only the salience of freedom argument was significantly related to general opinion. More specifically, compared to respondents who did not mention any con arguments, respondents who thought primarily of smokers' freedom being restricted when they were asked to mention an argument against the smoking ban were more likely to be against the smoking ban. As shown in Figures 7 and 8, this was the case at both waves

(β_{wave2}=-.09; p<.05; β_{wave3}= -.08; p<.001).

4.2.1.2 Beliefs about the smoking ban

It was also hypothesized that respondents' beliefs would be related to their general opinion about the smoking ban More specifically, it was expected that respondents who hold positive beliefs about the smoking ban would be more likely to be in favor of it and that respondents who hold negative beliefs about the smoking ban will be less likely to be in favor of it[9].

As shown in Figures 7 and 8, the data supported, in general, these hypotheses. At both waves, respondents were more likely to be in favour of the smoking ban if they believed that (a) the health of non-smokers would improve thanks to the smoking ban (β_{wave2}=.22; p<.001; β_{wave3}=.11; p<.05) and (b) the smoking ban does not infringe on smokers' freedom (β_{wave2}=.09; p<.05; β_{wave3}=.11; p<.001). Beliefs about the economic impact of the smoking ban for bar and restaurants owners and about the fact that smoking would generally decrease were related to general opinion at wave 2 only: respondents were more likely to be in favour of the smoking ban if they believed that (c) the smoking ban would not have a negative economic impact on bar and restaurant owners (β_{wave2}=.11; p<.05) and (d) smoking would generally decrease (β_{wave2}=.07; p<.05). Two beliefs were not related to general opinion, neither at wave 2 nor at wave 3: the belief that some smokers would stop smoking and the belief that price in the gastronomy would increase after implementation of the smoking ban.

9 For negative beliefs (i.e., the smoking ban infringes on smokers' freedom; the smoking ban will have negative economic consequences on bar and restaurant owners), the answers were recoded such that negative beliefs are expected to correlate positively with general opinion. A positive correlation means that respondents who do not hold these negative beliefs are more likely to be in favor of the smoking ban, which simply reverse the hypothesis that was formulated.

4.2.2 The impact of self-interest on opinion formation

It was hypothesized that self-interest would play a significant role in opinion formation about the smoking ban. More specifically, it was expected that non-smokers and respondents bothered by cigarette fumes in smoky environments would be more likely to support the smoking ban than smokers and respondents who are comfortable being in smoky environments. In addition, because different opinions are supposed to rely on different cognitive configurations, it was further hypothesized that the impact of self-interest would be mediated by argument salience and beliefs. More specifically, it was expected that non-smokers and respondents feeling bothered by cigarette fumes would be more likely to remember pro arguments and to hold positive beliefs about the smoking ban and less likely to remember con arguments and to hold negative beliefs about the smoking ban than smokers and respondents who are comfortable being in smoky environments.

4.2.2.1 Argument Salience

With respect to argument salience, the results show that the influence of self-interest (i.e., smoking status and feeling bothered by being in smoky environments) on general opinion was mediated by the salience of the freedom argument. As previously noted, the freedom argument was the only argument whose salience directly impacted general opinion. At both waves, the more respondents feel bothered in smoky environments the less they were likely to mention restriction of freedom as the most important reason against the smoking ban (β_{wave2}= -.25; $p<.05$; β_{wave3}= -.35; $p<.05$). In addition, smoking status was significantly related to the salience of freedom argument at wave 2 only, where smokers were more likely than non-smokers to mention restriction of freedom as the most important argument against the smoking ban (β_{wave2}= -.68; $p<.001$).

The analyses showed that self-interest was also significantly related to the salience of other arguments, but the salience of these arguments had then no further impact on

general opinion. Specifically, smokers were more likely than non-smokers to mention any other arguments against the smoking ban (β_{wave2}= -.92; p<.05; β_{wave3}= -1.05; p<.001). Neither smoking status nor the feelings people have about being in smoking environments were significantly related to the salience of economic arguments.

As previously noted, the salience of pro argument was not related to general opinion and was therefore dropped from the final model that was tested in the primary analysis. However, supplemental analyses were conducted to explore the potential effect of self-interest on the salience of pro arguments (Table 59, p. 226). Results indicate that self-interest was not related to the ability to mention an argument in favor of the ban as all respondents mentioned at least one pro argument. It however had a slight impact on the type of pro argument that were mentioned. Specifically, at wave 2, compared to smokers, non-smokers were more likely to mention health-related arguments than the fact that cigarette fumes might bother them (β_{wave2}= -.75, p<.05) as well as any other specific argument in favor of the ban (β_{wave2}= -.77, p<.05). At wave 3, self-interest was not related to the salience of pro arguments.

4.2.2.2 Beliefs about the smoking ban

Results show that the impact of self-interest on general opinion was also mediated by beliefs related to the smoking ban. Smoking status was significantly related to almost all beliefs. At both waves, non-smokers were more likely to think that (a) non-smokers' health would improve thanks to the smoking ban (β_{wave2}=.14; p<.001; β_{wave3}=.11; p<.05), (b) the smoking ban would not have negative economic impact for bar and restaurant owners (β_{wave2}=.21; p<.001; β_{wave3}=.10; p<.05) and (c) a smoking ban would not infringe on smokers' freedom (β_{wave2}=.18; p<.001; β_{wave3}=.13; p<.05). Non-smokers, however, were not more likely than smokers to think that smoking would generally decrease. As previously noted, not all beliefs were significantly related to general opinion. But smoking status was almost always significantly related to those beliefs that were also

directly related to general opinion.

The other self-interest variable (i.e., feeling bothered by being in a smoky environment) was also significantly related to people's beliefs about the smoking ban. At wave 2, it was related to almost all beliefs that were also significantly related to general opinion on the smoking ban. More specifically, people who feel bothered in a smoky environment were more likely to think that (a) non-smokers' health would improve thanks to the smoking ban (β_{wave2}=.05; p<.05), (b) the smoking ban would not have negative economic impact for bar and restaurant owners (β_{wave2}=.05; p<.05) and (c) a smoking ban would not infringe on smokers' freedom (β_{wave2}=.10; p<.001). At wave 3, the same self-interest variable was related to one belief only, namely the belief that the smoking ban would infringe on smokers' freedom, such that people who feel bothered in smoky environment were more likely to think that the smoking ban would not infringe on smokers' freedom (β_{wave3}=.04; p<.05). As previously noted, at wave 3, the economic belief was however not significantly related to general opinion.

4.2.2.3 General opinion

In addition to the hypothesized pathways, modifications indices indicated that smoking status was also directly related to general opinion at wave 2, such that non-smokers were more likely than smokers to be in favor of the smoking ban (β_{wave2}=.12, p<.001).

4.2.3 The impact of political predisposition

It was hypothesized that political predisposition would play a significant role in opinion formation about the smoking ban. As only one conservative right party clearly opposed the smoking ban, it was expected that supporters of conservative right parties would be more likely to oppose the smoking ban. In addition, because different opinions are

supposed to rely on different cognitive configurations, it was further hypothesized that party attachment would be mediated by argument salience and beliefs. More specifically, it was hypothesized that supporters of conservative right parties would be more likely to hold negative beliefs and to remember negative considerations and less likely to hold positive beliefs and to remember positive considerations about the smoking ban than supporters of moderate right or left parties or respondents not feeling close to any political party.

4.2.3.1 Argument Salience

With respect to salience of con arguments, there was only one significant pathway. At wave 2, contrary to expectation, supporters of left parties were more likely to mention restriction of freedom as the most important argument against the smoking ban than supporters of conservative right parties (β_{wave2}= 1.01, p<.05). At wave 3, party attachment was not related at all to the salience of con arguments. So there was no significant difference on salience of con arguments between supporters of conservative right parties and supporters of other parties or respondents who are not attached to any political party.

As previously noted, the salience of pro arguments was not related to general opinion and was therefore dropped from the final model that was tested in the primary analyses. However, supplemental analyses were conducted to explore potential effect of political predisposition on the salience of pro arguments (Table 59, p. 226). Results indicate that political predisposition had almost no significant impact on the salience of pro arguments. First, it was not related to the ability to mention an argument in favour of the smoking ban since all respondents mentioned at least one pro argument. Second, across both waves of data there was only one significant contrast: compared to supporters of conservative right parties, respondents who did not mention any party affiliation were more likely to mention health related arguments than the fact that cigarette fumes might bother them (β_{wave2}= -.83, p<.05). All other contrasts were not significant.

4.2.3.2 Beliefs about the smoking ban

Results show that the impact of party attachment on general opinion was principally mediated by negative beliefs about the smoking ban, namely the beliefs that smoking ban would have a negative economic impact on bar and restaurant owners and that it would infringe on smokers' freedom. But this was the case at wave 2 only.

At wave 2, party attachment was significantly related to the belief about potential loss of revenue for bar and restaurant owners. Specifically, supporters of left parties were more likely to believe that bar and restaurant owners would not have a negative economic impact on bar and restaurant owners than supporters of conservative right parties (β_{wave2}= .19, p<.05). In other words, supporters of conservative right parties were more likely to believe that the smoking ban would have a negative economic impact for bar and restaurant owners.

Additionally, at wave 2, party attachment was also significantly related to freedom belief. Supporters of moderate right and left parties, as well as respondents not being attached to any political party were more likely to believe that a smoking ban would not infringe on smokers' freedom than supporters of conservative right parties (moderate right: β_{wave2}= .22, p<.05; left: β_{wave2}= .26, p<.05; no party attachment: β_{wave2}=.19, p<.05). In other words, supporters of conservative right parties were more likely than any other respondents to believe that the smoking ban would infringe on smokers' freedom.

At wave 3, party attachment was significantly related to the economic belief only. Compared to supporters of conservative right parties, supporters of moderate right parties were less likely to believe that the smoking ban would not have a negative economic impact on bar and restaurant owners (β_{wave3}=-.15, p.<.05). In other words, supporters of conservative right parties were more likely to believe that the smoking ban would not have a negative economic impact on bar and restaurant owners than supporters of moderate right parties. However, the economic belief was not further related to general opinion about the smoking ban.

Party attachment was not related to people's belief about potential health improvement for non-smokers nor the belief that smoking would generally decrease. This was the case at both waves.

4.2.4 Media

4.2.4.1 Persuasive media effects

Three hypotheses were formulated with respect to persuasive media effects. First, when the information flow coming from the media is one-sided, a positive, linear relationship was expected between media exposure on the one side and beliefs and general opinion on the other side. Second, when the information-flow is two-sided and unevenly balanced, a non-monotonic relationship was expected between media exposure on the one side and beliefs and general opinion on the other side. And finally, when the information-flow is two-sided and evenly balanced, media exposure was expected not to be related to beliefs and general opinion.

4.2.4.1.1 General Opinion

At wave 2, general media coverage about the smoking ban was evenly balanced. On average 50% of the media coverage was in favor of the smoking ban and 50% was against (Figure 3, p. 107; and Table 5, p. 104). General media coverage became more positive at wave 3 with 80% positive coverage and 20% negative coverage. At wave 2, newspaper coverage was two-sided and evenly balanced, whereas at wave 3 it was two-sided but unevenly balanced. Thus, it was hypothesized that media exposure will not be related to general opinion at wave 2 and non-monotonically related to general opinion at wave 3. As expected, media exposure was not related to general opinion at wave 2. But, contrary to expectation, it was not related to general opinion at wave 3 either. Linear as

well as non-monotonic relationships were tested and neither of them was significant.

4.2.4.1.2 Belief – Non-smokers' health will improve

For both waves 2 and 3, health was the dominant argument used in the media by proponents of the smoking ban to convince people of the necessity of such a measure (Tables 7 and 9, pp. 109 and 112). Moreover, the argument that passive smoking is damaging and that a smoking ban would improve non-smokers' health and health in general was hardly ever contested in the articles reviewed for this study's analyses. Opponents countered by arguing that there were other solutions for reducing passive smoking (Tables 8 and 10, pp. 110 and 113). However, by so doing, they implicitly admitted that passive smoking is damaging and that a reduction of secondhand smoke was desirable. In sum, media coverage largely agreed upon health effects of passive smoking and the necessity of its reduction. As media coverage on health related aspects of the smoking ban was one-sided at both waves (Figure 4, p. 117), media exposure was expected to be positively and linearly related to the probability of believing that the smoking ban would improve non-smokers' health (i.e., health belief). The results were not consistent with this hypothesis. At wave 2, general media exposure was not related to the health belief. In contrast, exposure to political articles was significantly related to the health belief but not in the expected direction (β_{wave2}= -.01, $p<.05$): the more respondents were exposed to political articles, the less they were likely to believe that the smoking ban would have a positive impact on non-smokers' health. At wave 3, media exposure was not significantly related to health belief at all.

4.2.4.1.3 Belief – General smoking decrease

This belief is somewhat unusual as it referred to a very general and vague question (i.e., if a smoking ban is imposed in restaurants and bars in Ticino, do you expect that smoking would generally decrease?) and as such might have been interpreted by the

respondents in various ways. It might refer to the fact that some smokers would stop smoking after the implementation of the smoking ban or that less people would smoke in public places and that the amount of cigarette fumes would generally decrease. It was somewhat difficult to find any truly comparable item in the newspaper coverage. For this reason, the impact of media coverage on this belief was explored without any specific hypotheses. Results showed that media exposure was not significantly related to this belief, neither at wave 2 nor at wave 3. Linear, as well as non-monotonic relationships were tested and neither of them was significant.

4.2.4.1.4 Belief – The smoking ban will have a negative economic impact

The economic impact that a smoking ban might have on bar and restaurant owners was not the dominant topic but was one of the most important issues in the newspaper coverage related to the smoking ban (Tables 8 and 10, pp. 110 and 113). As shown by the content analysis, the idea that the smoking ban might have a negative economic impact for bar and restaurant owners is far to elicit consensus. In other words, at wave 2, this con argument was contested in about 33% of the cases and at wave 3 in about half of the cases. In contrast, potential financial gains were evoked in only very few articles (Tables 7 and 9, p. 109 and 112). So, opinions in the media were divided with respect to whether bar and restaurant owners would loose revenue after the implementation of the smoking ban. Since newspaper coverage on the economic argument was two-sided and might be considered either unevenly or evenly balanced (Figure 4, p. 117), media exposure was expected either to not be related to this belief at all or to be non-monotonically related to it. Linear and non-monotonic relationships were tested. Results showed that neither of them was significant. Media exposure was not related at all the this economic belief.

4.2.4.1.5 Belief – The smoking ban infringes on smokers' freedom

The idea that smokers' freedom would be illegitimately infringed upon was the most

prominent con arguments in the media coverage (Tables 8 and 10, pp. 110 and 113). This argument was however refuted in about 20% of the cases at wave 2 and in about 30% of the cases at wave 3. As newspaper coverage on that issue is two-sided and unevenly balanced (Figure 4, p. 117), media exposure was expected to be non-monotonically related to people's belief about freedom issue. Contrary to expectation, media exposure was not related at all to people's belief about freedom.

4.2.4.2 Cognitive media effects

Two cognitive media effects were explored: attribute agenda-setting and attribute priming.

4.2.4.2.1 Attribute agenda-setting

Attribute agenda-setting postulates that by emphasizing certain issue attributes, the media impacts the salience of these attributes among the public. Two hypotheses were derived. First, it was hypothesized that respondents would be, in general, more likely to mention the pro and con arguments that were intensively covered than the less intensively covered ones. Results were, in general, consistent with this hypothesis. More specifically, results of the content analysis showed that the pro arguments most reported by the media were health related arguments (Tables 7 and 9; p.109 and 112; see also chapter 4.1.1.3.3, p. 114). As expected, it was also the argument that was most frequently mentioned by respondents when they were asked to mention the most important argument in favor of the smoking ban (Table 11, p. 119). It was mentioned by 60% of respondents at wave 2 and by 53% of respondents at wave 3. Two other pro arguments were also quite prominent in the media: (1) the fact that a smoking ban would reduce harassment for non-smokers and (2) the fact that other countries have reported positive experiences with smoking bans. Whereas harassment caused by smoking was also addressed by a few respondents (11% at wave 2 and 15% at wave 3), the fact that other

countries have made good experiences with smoking bans was rarely or never mentioned[10].

With respect to con arguments, the argument that smokers' freedom would illegitimately be infringed upon was one of the most dominant con arguments reported in the media at wave 2 and by far the most dominant one at wave 3 (Tables 8 and 10, p.110 and 113). As expected, the freedom argument was also the con argument that people most frequently reported when they were asked to mention the most important argument against the smoking ban (Table 11, p.119). It was mentioned by 25% of respondents at wave 2 and by 35% of respondents at wave 3. Two other con arguments were also quite prominent in the media: (1) the fact that less restrictive solutions exist against passive smoking and (2) that the smoking ban might have a negative economic impact on bar and restaurant owners. The potential negative economic consequences were also mentioned by a few respondents as the most important reason against the smoking ban (8% at wave 2 and 4% at wave 3). In contrast, the implementation of less restrictive solution was rarely or never mentioned as one of the most important con arguments[11].

The second attribute-priming hypothesis postulated that the more people were exposed to media coverage the more they would be likely to mention the arguments that were prominent in the media. Results do not support this hypothesis. Media exposure was not related either to the salience of pro arguments or to the salience of con arguments (Figures 7 and 8, and Table 58 at p. 225).

4.2.4.2.2 Attribute priming

The attribute priming hypothesis assumes that issue attributes emphasized in the media

10 It is not possible to exactly know the percentage of respondents who mentioned this argument, because arguments that were rarely mentioned were regrouped in the “other” category which is a miscellaneous category.

11 Ibid.

will become significant dimensions of issue evaluation. Again, two hypotheses were derived. It was first hypothesized that beliefs related to con and pro arguments that were intensively covered would be significantly related to general opinion. Results, in general, were consistent with this hypothesis (Figures 7 and 8). The content analysis showed that the following pro and con arguments were very prominent in newspaper coverage: (1) the fact that non-smokers' health would be improved thanks to the smoking ban, (2) that a smoking ban would infringe on smokers' freedom and (3) that the smoking ban would have negative economic consequences on bar and restaurant owners. As previously noted, the beliefs related to these arguments were found to be significant predictors of individuals' general opinion on smoking ban.

The second hypothesis posited that media exposure would moderate the impact of these beliefs on general opinion about the smoking ban. Results of the interaction analyses were inconsistent with this hypothesis (Tables 55 and 56, p. 221 and 222). Neither the time people spent reading newspapers in general nor the time they spent reading political articles did moderate the impact of the different beliefs on general opinion.

4.2.5 Interpersonal communication and perceived support

4.2.5.1 Discussion frequency and perceived support

It was hypothesized that the discussion frequency with people who were strongly opposed to the smoking ban (i.e., strong opponents), as well as the discussion frequency with people who were strongly in favour of the smoking ban (i.e., strong supporters) would be related to perceived support within one's social environment (i.e., relatives, friends, co-workers). The results presented in Figures 7 and 8 (pp. 138 and 139) are consistent with these hypotheses. Respondents who spoke several times with strong supporters were more likely to report that most of their friends, relatives and co-workers

were in favor of the smoking ban than respondents who never discussed with strong supporters (β_{wave2}=.13, p<.001; β_{wave3}=.12, p<.001). Similarly, respondents who had several discussions with strong opponents were less likely to report that most of their friends, relatives and co-workers were in favor of the smoking ban than respondents who never discussed the issue with strong opponents (β_{wave2}= -.09, p<.05; β_{wave3}= -.09, p<.05). Additionally, having spoken only one time with a strong supporter or with a strong opponent did not make any difference on perceived support.

In addition to the hypothesized pathways, modification indices indicated that perceived support was also significantly related to self-interest variables. First, feeling bothered in a smoky environment was significantly related to perceived support at both waves, such that respondents who feel bothered by cigarette fumes were more likely to have the impression that their social environment was mostly in favor of the smoking ban (β_{wave2}=.07; p<.001; β_{wave3}=.04; p<.05). Second, smoking status was significantly related to perceived support at wave 2 only. Non-smokers were more likely than smokers to have the impression that their social environment was mostly in favor of the smoking ban (β_{wave2}=.19; p<.001).

4.2.5.2 The impact of perceived support

It was hypothesized that perceived support would be related to general opinion about the smoking ban. More specifically, it was expected that respondents who had the impression that their social environment was mostly in favor of the smoking ban would be more likely to be in favor of the smoking ban than respondents who had the impression that their social environment was mostly against the smoking ban. In addition, because different opinions are supposed to rely on different cognitive configurations, it was further hypothesized that the impact of perceived support on general opinion would be mediated by the salience of pro and con arguments and by beliefs about the smoking ban. More specifically, it was expected that respondents who

had the impression that their social environment was mostly in favor of the smoking ban would be more likely to remember pro arguments and to hold positive beliefs about the smoking ban and less likely to remember con arguments and to hold negative beliefs about the smoking ban than respondents who had the impression that their social environment was mostly against the smoking ban.

4.2.5.2.1 Argument Salience

The results show that the impact of perceived support on general opinion was not mediated by the salience of con arguments. There was only one significant contrast based on perceived support across both waves: at wave 2, respondents who had the impression that their social environment was mostly against the smoking ban were more likely to mention an economic argument; whereas respondents who had the impression that their social environment was mostly in favor of the smoking ban were more likely to not have been able to mention any con arguments (β_{wave2}= -.67, p<.05). However, the salience of economic arguments was not directly related to general opinion.

It was hypothesized that the impact of discussion frequency with strong opponents versus strong supporters on the salience of arguments would be mediated by perceived support. However, at wave 3, discussion frequency with strong opponents versus strong supporters was also directly related to the salience of con arguments, over and above its impact on perceived support. Specifically, there was one significant contrast based on discussion frequency with strong opponents: respondents who never discussed with strong opponents were more likely to not have been able to mention any con arguments; whereas respondents who had already spoken several times with strong opponents were more likely to mention any other specific con arguments (β_{wave3}=.59, p<.05). Similarly, there was one significant contrast based on discussion frequency with strong supporters: respondents who had never discussed the ban with strong supporters were more likely to mention an economic argument; whereas respondents who already discussed the ban

with strong supporters at least one time were more likely to not have been able to mention any con arguments (β_{wave3}= -8.81, p<.001).

As previously noted, the salience of pro arguments was not related to general opinion and was therefore dropped from the final model that was tested in the primary analyses. However, two supplemental multinomial logistic regressions were conducted to explore the potential effect of interpersonal discussion and perceived support on the salience of pro arguments (Tables 60 and 61, pp.228 and 230). The results provided only limited support for the impact of perceived support and interpersonal discussion on the salience of pro arguments. First, neither discussion frequency with strong supporters versus strong opponents nor perceived support were related to the ability to mention an argument in favour of the smoking ban since all respondents mentioned at least one pro argument. Furthermore, at wave 2, perceived support and discussion frequency with strong supporters versus strong opponents were not significantly related to the type of pro arguments that were mentioned. In contrast, at wave 3, discussion frequency with strong supporters and perceived support had a slight impact on the type of pro argument that were mentioned. Specifically, there was one significant contrast based on discussion frequency with strong supporters: respondents who never spoke with strong supporters about the smoking ban were more likely to mention health related aspects about the ban; whereas respondents who had already spoken several times with strong supporters were more likely to argue that a smoking ban needs to be implemented because smokers do not respect non-smokers in public places (β_{wave3}= .65, p<.05). Additionally, there was one significant contrast based on perceived support: respondents who had the impression that their social environment was mostly against the smoking ban were more likely to argue that the smoking ban needs to be implemented because cigarette fumes bother them; whereas respondents who had the impression that their social environment was mostly in favor of the smoking ban were more likely to mention health related aspects (β_{wave3}= -.63, p<.05). Discussion frequency with strong opponents was not related to the salience of pro argument.

4.2.5.2.2 Beliefs about the smoking ban

The results show that perceived support of friends, relatives and co-workers was related to all beliefs about the smoking ban. Compared to respondents who reported that their social environment was mostly against the smoking ban, respondents who reported that their social environment was mostly in favor of the smoking ban were more likely to believe that (a) non-smokers' health would improve thanks to the smoking ban (β_{wave2}=.18, p<.001; β_{wave3}=.15, p<.001), (b) smoking would decrease generally (β_{wave2}=.17, p<.05; β_{wave3}=.13, p<.05), (c) the smoking ban would not have a negative economic consequences for bar and restaurant owners (β_{wave2}=.23, p<.001; β_{wave3}=.17, p<.001), and (d) the smoking ban would not infringe on smokers' freedom (β_{wave2}=.16, p<.05; β_{wave3}=.13, p<.05).

It was hypothesized that the impact of discussion frequency with strong opponents versus strong supporters on beliefs would be mediated by perceived support. However, in some cases, discussion frequency with strong opponents impacted beliefs directly, over and above its impact on perceived support. At wave 2, discussion frequency with strong opponents was related to health and freedom beliefs. Specifically, compared to respondents who had never discussed the ban with strong opponents, those who already discussed the ban with strong opponents were less likely to believe that (a) non-smokers' health would improve thanks to the smoking ban (β_{wave2}= -.15, p<.05) and (b) the smoking ban would not infringe smokers' freedom (β_{wave2}= -.10, p<.05). Also at wave 2, discussion frequency with strong supporters was found to directly impact health and freedom beliefs. Specifically, compared to respondents who had never discussed the ban with strong supporters, respondents who discussed the ban with strong supporters were more likely to believe that (a) non-smokers' health would improve thanks to the smoking ban (β_{wave2}=.08, p<.05) and (b) the smoking ban would not infringe on smokers' freedom (β_{wave2}=.12, p<.05). At wave 3, discussion frequency with strong opponents was found to be directly related to the belief about economic consequences for bar and restaurant owners. Specifically, compared to respondents who never discussed the ban with strong

opponents, respondents who already discussed the ban several times with strong opponents were more likely to believe that the smoking ban would have negative economic consequences for bar and restaurant owners (β_{wave3}= -.08, p<.05).

4.2.5.2.3 General opinion

It was hypothesized that the impact of perceived support would be mediated by the salience of pro and con arguments and by beliefs. However, as can be seen in the model diagrams (Figures 7 and 8, pp. 138 and 139), perceived support was also directly significantly related to general opinion over and above its impact on the aforementioned mediators. As compared to respondents who had the impression that their social environment was against the smoking ban, respondents who had the impression that their social environment was in favor of it were generally more likely to be in favor of the smoking ban (β_{wave2}=.26, p<.001; β_{wave3}=.30, p<.001).

5. DISCUSSION

The purpose of the current study was to examine public opinion about the smoking ban that was voted into law in March 2006 in Ticino, Switzerland. The proposed theoretical model that was used as a general framework for the study was developed by Hoffman and colleagues (2007). Their model conceptualizes public opinion as a communication process where individual opinions are shaped by the interactive effect of intrapersonal and contextual variables. New information obtained by the mass media and through interpersonal discussions are integrated with old information and preconceptions people might have on the issue at stake. Three sources of influence are taken into consideration: intrapersonal characteristics, media coverage and interpersonal discussion. First, intrapersonal characteristics are supposed to influence the processing and acceptance of each new piece of information. Different individuals do not react the same way to the same information. Second, mass media also plays an important role in public opinion. By covering an issue, the media stimulate public discussion about it. The media also disseminates issue specific information that is supposed to influence the way people form an own opinion about it. Media coverage on an issue might vary with respect to intensity and to the perspective under which the issue is presented. All these factors might influence public opinion. Finally, interpersonal discussions are also considered as a contextual factor that cannot be neglected. Once an issue is addressed by the media, people might start discussing about it in their circle of friends, within their family or at work. Individual opinion formation is then also influenced by the type of discussants people encounter. The following discussion will be organized by the different sources of influence that were just evoked and that also structured the literature review.

5.1 The impact of self-interest and political predisposition

Two aspects are often considered in the literature as important, intrapersonal sources of influence on opinion formation: self-interest and political predisposition. The self-interest perspective assumes that people always seek to maximize their benefits and minimize their costs. According to this theoretical perspective, people will then automatically choose the policy alternative that will increase their wealth, power or prestige. In contrast, the political predisposition model holds that people are guided in their political choices by internalized and long-standing values which are reflected by their ideological orientation or party attachment.

Recently, a debate arose in the literature about the relative importance of these two perspectives in shaping individual opinion formation (e.g., Dixon, Lowery, Levy and Ferraro, 1991; Green & Gerken, 1989; Sears, Lau, Tyler & Allen, 1980). A burgeoning literature suggest that self-interest, compared to political predispositions, is only vaguely related to political preferences. This perspective is however contested by a minority or researchers who argue that the influence of self-interest on political opinion formation is not as trivial as assumed. Some of these researchers have studied the impact of self-interest on policy preferences related to smoking restrictions (Dixon et al., 1991; Green & Gerken, 1989) and found that self-interest had a significant impact. They however did not integrate political predisposition into their analyses, so that they did not assess the differential impact of self-interest and political predisposition on opinion formation. Yet, comparing the impact of both simultaneously is important, because the majority of researchers do not argue that self-interest does not exert any influence at all, but that it plays a minor role compared to political predisposition. The current study expands upon their conclusion by integrating both frameworks. It included two indicators of self-interest: smoking status and whether people feel bothered or not in a smoky environment; and a unique indicator of political predisposition: party attachment.

5.1.1 The impact of self-interest

The current study's results reinforce the self-interest perspective. Like Green & Gerken (1989) and Dixon et al. (1991), self-interest was found to influence people's beliefs regarding the smoking ban. At both waves, smoking status and people's feelings about being in a smoky environment were generally related to those beliefs that were also significantly related to general opinion about the smoking ban. Smokers and people who did not feel bothered by cigarette fumes in public places were in general more likely to believe that (a) the smoking ban was a violation of freedom, (b) it would have negative economic impact for bar and restaurant owners and (c) it would not necessarily improve health of non-smokers. In contrast, non-smokers and people who feet bothered by cigarette fumes were more likely to think that (a) the smoking ban had nothing to do with smokers' freedom, (b) it would not have any economic impact on bar and restaurant owners and (c) it would improve non-smokers' health. Moreover, when asked to mention the most important reason against the ban, smokers as well as people who did not feel bothered by cigarette fumes were more likely to argue that a smoking ban illegitimately infringes on smokers' freedom, whereas non-smokers and people feeling bothered by cigarette fumes had a hard time reporting any argument against the smoking ban. In addition, smoking status was directly related to general opinion over and above its impact on the mediators (i.e. argument salience and beliefs). Smokers were, in general, more likely to be against the smoking ban. In general the same result pattern can be observed at both waves. In only few cases, smoking status or how people feel in smoky environment were not related to some significant mediators.

5.1.2 The impact of political predisposition

During the political debate about the smoking ban in Ticino, only one conservative right party (e.g., La Lega) clearly opposed the smoking ban (Boneschi, Antonietti, Tomada, Schulz, & Ehmig, 2008). The other parties never defended a clear position with respect

to this issue. It was therefore hypothesized that supporters of conservative right parties would be more likely to oppose the smoking ban than supporters of any other parties. In this study, party attachment was also found to be related to some significant mediators of general opinion. But its impact was less systematic than the one of self-interest variables. Party attachment was significantly related negative beliefs about the smoking ban, namely the belief that the smoking ban infringes on smokers' freedom and the belief that it will have a negative economic impact on bar and restaurant owners. At wave 2, supporters of conservative right parties were, as expected, more likely to believe that the smoking ban violates smokers' freedom than supporters of moderate right and left parties and than respondents not feeling close to any political party. Similarly they were, as expected, more likely to think that the smoking ban would have a negative economic impact on bar and restaurant owners than supporters of left parties. At wave 2, both the freedom and the economic beliefs were significantly related to general opinion about the smoking ban. At wave 3, the impact of party attachment diminished somewhat. Party attachment was related to the economic belief only. As compared to supporters of moderate right parties, supporters of conservative right parties were more likely to believe that the smoking ban would not have a negative economic impact on bar and restaurant owners. However, at wave 3, the economic belief was not directly related to general opinion anymore.

5.1.3 Self-interest versus political predispositions

Contrary to what is stated by a majority of researchers, self-interest was found to be an important factor, at least as important as –if not more important than– political predisposition, in shaping individual's reaction to the political proposal of instituting a smoking ban by influencing their beliefs and the cognitive accessibility of information. Why does self-interest play such an important role in the context of the smoking ban whereas the majority of the recent literature suggests that its impact is insignificant

compared to political predisposition? Several reasons are evoked in the literature. The impact of self-interest on beliefs and opinions is supposed to be stronger when the stakes are easy to understand and relatively large (Chong, Citrin and Conley, 2001). The smoking ban issue can be considered as an easy political issue in the sense that people can easily identify the groups of individuals who have a stake in it and understand what they can win or lose if one or the other alternative is chosen. This is not the case for every political issue. As an example we will examine the discussion surrounding health insurances. Nowadays, in Switzerland there are many different private health insurance companies. Recently, there was a debate about the possibility of setting up a single health insurer. Compared to a smoking ban, the health insurance issue was much more complicated. Proponents argued that citizens would benefit much more from the new system. Opponents held the contrary position, namely that the new system would be to citizens' disadvantage. So finally, it was not clear at all who would end up paying more and who would end up paying less if the initiative of a single insurer would have passed. When an issue is very complicated people have a hard time identifying their own stakes in it and identifying the policy alternative that will improve or deteriorate their everyday life. Thus, in such a situation it is much more difficult to think and act (i.e., when voting) in terms of self-interest.

In the current study, political predisposition might also not have exerted its full impact because the smoking ban is not a typical issue along which political parties are divided and the issue was not framed as a debate along the lines of opposing parties. As previously noted, only the Lega, a small conservative right party, was clearly opposed to the smoking ban (Boneschi, Antonietti, Tomada, Schulz and Ehmig, 2008). They opposed the parliamentary decision and launched a political initiative in order to organize a popular ballot on it. The other parties did not hold a clear and official position on this issue. Rather, isolated politicians expressed their opinion in the media. So when an issue is not framed in ideological terms, citizens might be less likely to apply political predisposition when thinking and forming an opinion on this issue (Bartels, 2000).

5.1 Media

One of the objectives of this study was to examine the role played by the media in shaping individual opinion on the smoking ban. Drawing upon the literature about media effects, different hypotheses were tested.

First, persuasive effects on beliefs and opinion were tested based on Zaller's (1992, 1996) theory. According to this author, a persuasive media effect depends on the nature and the direction of the information flow. When the information flow is one-sided, media exposure is expected to be linearly related to beliefs and opinions: the more people are exposed to the news coverage, the more their beliefs and opinion should reflect what is reported in the media. When the information flow is two-sided and evenly balanced, media exposure is expected to not be related to beliefs and opinions. In contrast, when the information flow is two-sided but unevenly balanced, media exposure is expected to be non-monotonically related to beliefs and opinions.

In order to select the right hypothesis to test when examining the relationship between media exposure on the one side and the different beliefs or general opinion on the other side, data from the content analysis conducted on the principle Ticino newspapers were examined. Thanks to these data, it was possible to know the general slant of the newspaper coverage, the type of arguments that were exchanged and the degree to which each argument was disputed in the media. Thus, for each belief, it was possible to determine which of the three aforementioned hypotheses had to be tested.

In addition to persuasive media effects, two additional cognitive media effects were analyzed: attribute agenda-setting and attribute priming. The attribute agenda-setting hypothesis postulates that the media impact the cognitive accessibility of certain information pieces. By emphasizing certain aspects of an issue, the media influence what

people will automatically remember when they think about the issue at stake. Thus, it was hypothesized that the more people were exposed to media coverage, the more they would be likely to mention the arguments that were intensively covered by the media. The attribute priming hypothesis assumes that media exposure moderates the impact of certain issue related beliefs on issue evaluation. By calling attention to certain aspects of the issue, the media defines the criteria of political judgment by increasing the impact of certain beliefs on opinion and judgment.

In some cases ─for instance when the information flow was two-sided and evenly balanced─ no media effects were expected. In other cases, they were. However, in those cases where they were expected, results offer, in general, very little support for any media effects. In other words, neither general exposure to newspapers articles nor specific exposure to political articles were linearly related to beliefs when the belief specific information-flow was one-sided. Similarly, they were not non-monotonically related to beliefs and general opinion when the belief specific or the general information flow was two-sided and unevenly balanced. In addition, contrary to expectation, media exposure was not related to the salience of pro or con arguments about the smoking ban nor did it strengthen the relationship between certain beliefs and general opinion.

Several factors might explain the lack of media effect in this study. First, some issues might be more susceptible to media effects than others. For instance, Zaller (1992, 1996) maintains that persuasive media effects are less likely for familiar issues. When the issue is familiar, people are more likely to have already formed a crystallized opinion about it. For several reasons, the smoking ban can be considered as a very familiar issue for Ticino inhabitants. First, the struggle opposing health officials to tobacco companies on the health damages caused by smoking started half a century ago. The arguments they used and the way they framed their discourse is not new. Second, discussions about damaging effects of secondhand smoke and the benefits of smoking restrictions in public places is also not a new topic. As presented in the contextual introduction, the debate

about passive smoking and non-smokers' protection emerged in Switzerland in the second half of the 1970s, was already heavily debated during the 1980s and lead in the 1990s to the first law requiring that non-smokers should be protected from passive smoking at their workplace. Lastly, Italy, the neighboring country, introduced a smoking ban in public places about one year before the surveys used for the current study took place. Ticino inhabitants share the same language and the introduction of the smoking ban in Italy was heavily covered in Ticino newspapers. So the public debate on the smoking ban in Ticino started long before people had to express their opinion about the smoking ban in the surveys. All these arguments make a strong case justifying that the smoking ban was already a familiar issue for most respondents and as such might explain the absence of media effects in our analyses.

Issue obtrusiveness is also considered as a potential moderator of media effects. Issues can be classified along a continuum ranging from obtrusive to unobtrusive. Obtrusive issues are those issues that people experience in their daily lives. Neumann (1990) presents the example of inflation. When inflation occurs, people can experience it directly every day when they buy something, by noticing for instance that prices have increased. In contrast, unobtrusive issues are very remote issues that people would not be aware of if the media would not have reported on it. A good example of unobtrusive issue would be North Korea's nuclear program. Media effects like agenda-setting are supposed to be stronger for unobtrusive issues (McCombs & Reynold, 2002). Again from this point of view, the smoking ban cannot be considered as the type of issue from which one would expect strong media effects. Indeed, the smoking ban issue falls closer on obtrusive side of this continuum. Non-smokers have daily contact with smokers. Every non-smoker has already experienced being in a smoky environment and being more or less bothered by cigarette fumes. Most smoker have probably already been asked to put out his/her cigarette or to smoke somewhere else. In some way, smoking issues are part of daily life.

Interpersonal communication might also explain the lack of media effect. The difference between people who read the newspapers and those who do not read the newspapers might vanish because they have been discussing this topic with one another. For instance, let we assume that person A is a heavy newspaper reader and that his colleague, person B, does not read the newspapers at all. Because person A reads the newspapers everyday, he might learn that the parliament wants to implement a smoking ban because passive smoking is damaging for non-smokers, that the Lega was against this parliamentary proposition because it infringes smokers' freedom, and that the Swiss association of bar and restaurant owners fears the negative, economic impact that such a ban might have. Before meeting with his co-worker, the difference in level of information between person A and person B will be high, because person B did not read the newspapers and so does not know the whole story. But during lunch, person A will discuss with his colleague the article(s) he read about the smoking ban and he will most likely share what he knows about the issue with person B. After this personal exchange the difference in information level between person A and B will be greatly diminished, if not all together vanish. What person A learned by means of newspaper articles, person B learned by means of interpersonal discussion. Once interpersonal discussion started, the difference between the reader and non-reader fades and the chances of finding individual-level media effects are greatly reduced. The neutralizing effect of interpersonal communication might be even more evident when the issue is not very complicated as it is the case with the smoking ban. When the arguments are easy to understand, it is easier to talk about with one another. When the issue is very complicated, it might be much more difficult to transmit the message orally.

The role played by interpersonal communication might also explain the fact that media effects are more likely to be influential at an aggregate level than at an individual level. Once the information is launched by the media, it circulates then among the population through interpersonal communication so that the way people think about the smoking ban, no matter whether they read the newspapers or not, reflects what is reported by the

mass-media. In the current study, at the aggregate level, the pro and con arguments that were most salient and the beliefs that impacted general opinion about the smoking ban correspond to what was reported by the media. For example, the pro argument that was most often mentioned by respondents is the health argument, which was also the most prominent argument in the media coverage. Even if there is no difference between newspaper readers and non readers, the information that spread among the population corresponds to what is reported by the media.

5.3 Interpersonal communication

The impact of interpersonal communication on opinion formation was also examined. It was hypothesized that people would form an overall impression of what the majority of their social environment thinks about the issue at stake based on interpersonal discussions. Furthermore, because people tend to share the same opinion as the majority of their social environment, it was then further hypothesized that perceived support would be related to general opinion and that its impact on opinion would be mediated by argument salience and beliefs.

Consistent with the proposed hypotheses, the frequency with which people discussed the issue with strong opponents versus strong supporters was significantly related to the impression they had about what the majority of their social environment thought about the smoking ban. Respondents who often discussed with strong opponents were more likely to have had the impression that the majority of their social environment was against the smoking ban. In contrast, respondents who often discussed with strong supporters were more likely to have had the impression that the majority of their social environment was in favor of the smoking ban.

Contrary to expectation, the impact of perceived support and interpersonal

communication was not mediated by the salience of arguments. Living in a social environment which is against the smoking ban did not increase the salience of freedom argument which is the only salience variable that was directly significantly related to general opinion.

In contrast, perceived support was significantly related to people's beliefs about the smoking ban. Respondents who had the impression that most of their friends, relatives and co-workers were in favor of the smoking ban were more likely to hold favorable beliefs toward the smoking ban. They were more likely to think that (a) non-smokers' health would improve, (b) smoking would decrease generally, (c) the smoking ban would not have a negative economic impact on restaurant and bar owners and (d) the smoking ban does not infringe smokers' freedom. In some cases, discussion frequency with opponents and supporters was also directly related to people's beliefs about the smoking ban, but not systematically.

In addition to the aforementioned hypotheses, results showed that perceived support was also directly related to general opinion over and above its impact on beliefs. Respondents who lived in a social environment which was perceived by the respondent as having a favorable attitude toward the smoking ban were more likely to be in favor of the smoking ban than respondents living in a social environment which they perceived as being against the smoking ban.

The results suggest that interpersonal communication is an important factor in public opinion, which might be even more crucial than exposure to mass media. According to the model that was tested here, frequency of interpersonal discussion with supporters versus opponents influenced people's perception about community support which in turn shape their own opinion about the smoking ban. However, as already discussed in the literature review, two individual-level processes might challenge this commonly held point of view regarding the direction of the causal relationship: selection effect and projection (Huckfeldt & Sprague, 1987). The first individual-level process assumes that

people tend to select discussion partners that share the same point of view. In this case, the direction of the causal relationship may be reversed. “People may enforce their preferences on the context by constructing a friendship group that serves as a 'protective environment'” (Huckfeldt, 1983, p. 653). If this is the case, there would be no room for social influence. The other individual-level process that might challenge the hypothesized causal relationship is projection and misperception. Level of correspondence are often assessed, as in the current study, based on respondent's self-reports. Respondents report not only their own opinion but also the opinion of their discussants. It is likely that people misperceive others' opinions or that they project their own opinion onto the others. In this case, social influence would be a measurement artifact. The only way to rule out this possibility is to conduct social network studies where network members are directly asked about their opinion.

Even though the current study provides strong support for the perspective that perceived support is related to personal opinion, it does however not allow for any conclusions to be made about the direction of the causal relationship since both individual-processes we just described might be taking place.

5.4 Limitations and directions for future research

Certain methodological limitations to this research should be noted. Of particular importance is the notion that the proposed model may be incomplete. Other processes may be occurring other than those included in the model which may be impacting opinion formation.

In addition, the proposed the model implicitly assumes a certain causal relationship, inferences about causality should be made only very cautiously as the analyses that were conducted remain correlational in nature. Moreover, in some cases, the reversed causal

relationship might be theoretically defendable. For instance, we assumed that group preferences shape people's personal attitudes. However, we have seen that this causal relationship might work in the other direction (see Chapter 2.5.1.4). First, people might choose their discussants according to their preferences. If this is the case, the causal relationship would be reversed: the strong relationship between personal opinion and the opinion of other network members would be the result of people's personal opinion. Second, when level of correspondence are assessed based on respondent's self-reports (i.e. respondents report not only their own opinion but also the opinion of their discussants), as it is the case in our study, projection effect might occur. This means that respondents might project their own opinion onto the others. And in this case, significant relationship between respondent's personal opinion and the opinion of other network members would only reflect a measurement artefact.

Furthermore, the data used for this study came from local surveys which limit the generalizability of these findings. Swiss citizens are in fact used to vote regularly on various political issues and as such makes this sample very special. Future research should therefore should then investigate other population in order to increase the generalizability of the findings.

Another consideration should be made with respect to the operationalization of some variables. Because this study base on secondary data, the operationalization of variables was not always optimal. For instance, the operationalization of some variables was not optimal. General opinion and all beliefs related to the smoking ban were measured by means of dichotomous variables which is a very crude measurement strategy. Dichotomous variables do not allow for more nuanced distinctions between people who are only slightly in favor/against the smoking ban from those who are more strongly in favor/against it. This could potentially be an important distinction in that their opinion formation process might be different than what was found in this study. A scale would have been a much more nuanced way to assess people's beliefs and opinions.

Also, the operationalization of the salience of arguments could have been better. In this study, salience of pro and con argument was measured by a single question asking individuals to mention the most important reason in favour versus against the smoking ban. Respondents were clearly instructed to mention only one reason. However, according to Zaller's (1992) theory, people's final opinion depends on all salient considerations that come to their mind at the moment they expressed it and not only on the one most salient argument in favor and the one most salient argument against. In order to test Zaller's (1992) model correctly, respondents should have been asked to list all thoughts that come to their mind just before they expressed their opinion. Their thoughts could then have been analyzed for their content and much more indicators could have been derived (i.e., total number of considerations, number of positive versus negative considerations, degree of ambivalence, argumentative structure,...). Future research should try to go in this direction.

Similarly, in this study, respondents were asked to mention the time they spend in a normal day reading newspapers in general and reading political articles. These measures are very vague indicators of media exposure. They do not measure whether respondents were exposed to articles about the smoking ban in particular. Yet, Zaller (1992) insists on the importance of having good measure of media exposure in order to detect mass media effects. One way to improve this measurement would have been to ask to what extent they followed the debate about the smoking ban in the newspapers. Zaller (1992) even recommends to ask precise knowledge questions about current political affairs. According to him, this procedure ensures an accurate measurement of whether people only superficially read the newspaper versus whether they tried to understand the information they were exposed to.

Finally, the present study examined individual opinion formation in the case of an easy obtrusive issue, which are not the type of issues one would expect strong and evident media effects. Therefore, future research should try to replicate the same type of analyses based on issues that are much more complicated.

6. REFERENCES

Asch, S.E. (1951). The effects of group pressure upon the modification and distortion of judgments. In H. Guetzkow (Ed.), *Groups, leadership and men* (pp. 177-190), Pittsburgh: Carnegie Press.

Baker, K.M. (1987). Politique et opinion publique sous l'Ancien Régime. *Annales. Économies, Sociétés, Civilisations*, 42 (1), 41-71.

Baker, K.M. (1989). *Inventing the French Revolution. Essays on French political culture in the eighteen century*. Cambridge, Port Chester, Melbourne, Sydney: Cambridge University Press.

Bartels, L.M. (2000). Partisanship and voting behavior, 1952-1996. *American Journal of Political Science*, 44 (1), 35-50.

Barnhurst, K.G., & Mutz, D., (1997). American journalism and the decline in event-centering reporting. *Journal of Communication*, 47 (4), 27-53.

Baumeister, R.F., & Newman, L.S. (1992). Self-regulation of cognitive inference and decision processes. *Personality and Social Psychology Bulletin*, 20 (1), 3-19.

Bayer, R., & Cologove, J. (1999). Science, politics, and ideology in the campaign against environmental tobacco smoke. *American Journal of Public Health,* 92 (6), 949-954.

Becker, L., & McCombs, M. (1978). The role of the press in determining voter reactions to presidential primaries. *Human Communication Research*, 4, 301-307.

Behr, R.L., & Iyengar, S. (1985). Television news, real-world cues, and changes in the public agenda. *Public Opinion Quarterly*, 49, 38-57.

Belknap, G., & Campbell, A. (1952). Political party identification and attitudes toward foreign policy. *Public Opinion Quarterly*, 15 (4), 601-623.

Benton, M., & Frazier, P.J. (1976). The agenda setting function of the mass media at three levels of information holding. *Communication Research*, 3 (3), 261-274.

Berelson, B.R., Lazarsfeld, P.R., & McPhee, W.N. (1954). *Voting: A study of opinion formation in a presidential campaign*. Chicago: University of Chicago Press.

Blondiaux, L. (1997). Les tournants historiques de la science politique américaine. *Politix*, 10 (40), 7-38.

Blondiaux, L. (1998). *La Fabrique de l'Opinion. Une Histoire sociale des Sondages*. Paris : Seuil.

Blumer, H. (1964). The mass, the public and public opinion. In B. Berelson & M. Janowitz (Eds.), *Reader in public opinion and communication* (pp.45-50). New York: Free Press.

Blumer, H. (1948). Public opinion and public opinion polling. *American Sociological Review*, 13

(5), 542-549.

Bollen, K., & Long, S. (1993). *Testing structural equation models*. Newbury Park: Sage.

Bollinger-Salzmann, H., Cloetta, B., Bähler, G., Müller, F., & Hofmann, C. (2000). *Programme Global Tabac 1996-1999 de l'Office fédéral de la santé publique. Rapport final concernant les résultats de l'évaluation globale*. Berne: Université, Institut de médecine sociale et préventive, unité de recherche en matière de santé.

Boneschi, M., Antonietti, A., Tomada, A., Schulz, P., & Ehmig, S. (2008). *Rapporto: ICH – progetto ESAGONO*. Lugano: Università della Svizzera italiana.

Bourdieu, P. (1972). L'opinion publique n'existe pas. *Les Temps Modernes*, 29 (318), 1292-1309.

Brandt, A.M. (2007). T*he Cigarette Century. The rise, fall, and deadly persistence of the product that defined America*. Basic Books. New York.

Brandt, A.M. (1990). The cigarette, risk, and American culture. *Daedalus*, 119 (4), 155-176.

Brewer, P.R. (2002). Framing, value words, and citizens' explanations of their issue opinions. *Political Communication*, 19, 303-316.

Brewer, P.R., & Gross, K. (2005). Values, framing, and citizens' thoughts about policy issues: Effects on content and quantity. *Political Psychology*, 26, 929-948.

Brosius, H.-B., & Barthelt, A. (1994). The utility of exemplars in persuasive communications. *Communication Research*, 21 (1), 48-78.

Brosius, H.-B., & Kepplinger, H.M. (1990). The agenda-setting function of television news: Static and dynamic views. *Communication Research*, 17 (2), 183-211.

Brosius, H.-B, & Weiman, G. (1996). Who sets the agenda: Agenda-setting as a two-step flow. *Communication Research*, 23, 561-580.

Campbell, A., Converse, P., Miller, W., & Stokes, D. (1960). *The American Voter*. Chicago: The University of Chicago Press.

Cappella, J.N., Price, V., & Nir, L. (2002). Argument repertoire as a reliable and valid measure of opinion quality: Electronic dialogue during campaign 2000. *Political Communication*, 19 (1), 73-93.

Cheung, Y.B. (2007). A modified least-squares regression approach to the estimation of risk difference. *American Journal of Epidemiology*, 12, 1-8.

Chong, D., Citrin, J., & Conley, P. (2001). When self-interest matters. *Political Psychology*, 22 (3), 541-570.

Chong, D., & Druckman, J.N. (2007). A theory of framing and opinion formation in competitive elite environments. *Journal of Communication*, 57, 99-118.

Converse, P.E. (1964). The nature of beliefs systems in mass publics. In D.E. Apter (ed.), *Ideology and Discontent* (pp. 206-261). New York: Free.

Conover, P.J., & Feldman, S. (1981). The origins and meaning of liberal-conservative self-identifications. *American Journal of Political Science*, 25, 617-645.

Craft, S., & Wanta, W. (2004). U.S. Public concerns in the Aftermath of 9-11: A test of second

level agenda-setting. *International Journal of Public Opinion Research*, 16 (4), 456-463.

Crespi, I. (1997). *The public opinion process: How the people speak*. Mahwah, NJ: Erlbaum.

Davison, W.P. (1957). The public opinion process. *Public Opinion Quarterly*, 22, 91-106.

Davison, W.P. (1983). The third person effect in communication. *Public Opinion Quarterly*, 47 (1), 1-15.

De Vreese, C.H., & Boomgarden, H.G. (2006). Media message flows and interpersonal communication: The conditional nature of effects on public opinion. *Communication Research*, 33 (1), 19-37.

Dixon, R.D., Lowery, R.C., Levy, D.E., & Ferraro, K.F. (1991). Self-interest and public opinion toward smoking policies: A replication and extension. *The Public Opinion Quarterly*, 55 (2), 241-254.

Doll, R., & Hill, A. B. (1950). Smoking and carcinoma of the lung. Preliminary report. *Bristish Medical Journal*, 2, 739-748.

Downs, A. (1957). *An economic theory of democracy.* New York: Harper and Row.

Druckman, J.N. (2004). Political preference formation: Competition, deliberation, and the (Ir)relevance of framing effects. *American Political Science Review*, 98 (4), 671-686.

Druckman, J.N., & Lupia, A. (2000). Preference formation. *Annual Review of Political Science*, 3, 1-24.

Edwards, G.C., Mitchell, W., & Welch, R. (1995). Explaining presidential approval: The significance of issue salience. *American Journal of Political Science*, 39 (1), 108-134.

Erbring, L., Goldenberg, E.N., & Miller, A.H. (1980). Front-page news and real-world cues: A new look at agenda-setting by the media. *American Journal of Political Science*, 24 (1), 16-49.

Evans, G., Heath, A., & Lalljee, M. (1996). Measuring left-right and libertarian-authoritarian values in the British electorate. *The British Journal of Sociology*, 47 (1), 93-112.

Eveland, W.P., & Glynn, C.J. (2008). Theories on the perceptions of social reality. In Donsbach W. and Traugott M.W. (eds), *The Sage Handbook of Public Opinion Research* (pp. 155-163). London: Sage Publication.

Fazio, R.H. (1995). Attitude object-evaluation associations: Determinants, consequences, and correlates of attitude accessibility. In R.E. Petty & J.A. Krosnick (Eds.), Attitude Strength: Antecedents and Consequences (pp. 247-282). Mahwah, NJ: Lawrence Erlbaum.

Fee E., Brown, T.M., Lazarus, J., & Theerman, P. (2002). The smoke nuisance. *American Journal of Public Health,* 92 (6), p. 931.

Fiordelli, M. (2009). Argumentative effects in the public discussion on the smoking ban. (Unpublished doctoral dissertation). Institute Communication and Health, Lugano, Switzerland.

Fischle, M. (2000). Mass response to the Lewinsky scandal: Motivated reasoning or bayesian updating? *Political Psychology*, 21 (1), 135-159.

Fishbein, M., & Ajzen, I, (1975). *Beliefs, attitudes, intentions and behavior: An introduction to*

theory and research. Reading, MA: Addison-Wesley.

Fishkin, J. S. (1999). Toward a deliberative democracy: Experimenting with an ideal. In S. Elkin & K. E. Soltan (Eds.), *Citizen Competence and Democratic Institutions* (pp. 279-290). State College, PA: Pennsylvania State University Press.

Fishkin, J.S. (2003). Consulting the public through deliberative polling. *Journal of Policy Analysis and Management*, 22 (1), 128-133.

Fishkin, J.S. (2009). *When the people speak: Deliberative democracy and public consultation*. Oxford: Oxford University Press.

Fishkin, J.S., & Luskin, R.J. (2000). Deliberative polling and public consultation. *Parliamentary Affairs*, 53, 657-666.

Fiorina, M.P. (1981). *Retrospective voting in American national elections*. New Haven: Yale University Press.

Fiorina, M.P. (2002). Parties and partisanship: A 40-year retrospective. *Political Behavior*, 24 (2), 93-115.

Fleishman, J.A. (1988). Attitude organization in the general public: Evidence for a bidimensional structure. *Social Forces*, 67 (1), 159-184.

Frey, D. (1986). Recent research on selective exposure to information. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (vol.19, pp. 41-80). San Diego, CA: Academic Press.

Gaines, B.J., Kuklinski, J.H., Quirk, P.J., Peyton, B., & Verkuilen, J. (2007). Same facts, different interpretations: Partisan motivation and opinion on Iraq. *Journal of Politics*, 68, 957-974.

Gatlin, D.S., Giles, M.W., & Cataldo, E.F. (1978). Policy support within a target group: The case of school desegregation. *The American Political Science Review*, 72 (3), 985-995.

Gastil, J., & Dillard, J.P. (1999). Increasing political sophistication through public deliberation. *Political Communication*, 16, 3-23.

Ghanem, S. (1997). Filling the tapestry: The second level of agenda-setting. In S. McCombs, D.L Shah, and D. Weaver (eds.), *Communication and Democracy. Exploring the Intellectual Frontiers in Agenda-Setting-Theory* (pp. 3-14). Mahawah (NJ), London.

Glynn, C.J. (2005). Public opinion as a social process. In S. Dunwoody, D. McLeod, L.B. Becker & G.M. Kosicki (Eds.), *The Evolution of Key Mass Communication Concepts* (pp. 139-164). Cresskill, NJ: Hampton Press.

Glynn, C.J., Herbst, S., O'Keefe, G.J., & Shapiro, R.Y. (1999). *Public opinion*. Boulder, CO: Westview.

Goidel, R.K., Shields, T.G., & Pfeffley, M. (1997). Priming theory and RAS models: Toward and integrated perspective of media influence. *American Politics Quarterly*, 25 (3), 287-318.

Golan, G., & Wanta, W. (2001). Second-level agenda setting in the new Hampshire primary: A comparison of coverage in three newspapers and public perceptions of candidates. *Journalism and Mass Communication Quarterly*, 78 (2), 247-259.

Green, D.P., & Gerken, A.E. (1989). Self-interest and public opinion toward smoking restrictions

and cigarette taxes. *The Public Opinion Quarterly*, 53 (1), 1-16.

Granovetter, M.S. (1973). The strength of weak ties. *The American Journal of Sociology*, 78 (6), 1360-1380.

Guilamo-Ramos, V., Jaccard, J., Turrisi, R., & Johansson, M. (2005). Parental and school correlates of binge drinking among middle school students. *Research and Practice*, 95 (5), 894-899.

Habermas, J. (1989). *The structural transformation of the public sphere: An inquiry into a category of bourgeois society.* Cambridge: Polity Press.

Hamill, R., Lodge, M., & Blake, F. (1985). The breadth, depth, and utility of class, partisan, and ideological schemata. *American Journal of Political Science*, 29 (4), 850-870.

Hanson, J.D., & Kyser, D.A. (1998/1999). Taking behaviouralism seriously: Some evidence of market manipulation. *Harward Law Review*, 112, 1420-1569.

Hastie, R., & Park, B. (1986). The relationship between memory and judgment depends on whether the judgment task is memory-based or on-line. *Psychological Review*, 93 (3), 258-268.

Hengartner, T., & Merki, C.M. (1993). Heilmittel, Genussmittel, Suchtmittel: Veränderung in Konsum un Bewertung von Tabak in der Schweiz. *Schweizerische Zetischrift für Geschichte*. Sonderdruck, Vol. 43. Basel: Schwabe.

Hetherington, M.J. (1996). The media's role in forming voters' national economic evaluations in 1992. American Journal of Political Science, 40 (2), 372-395.

Higgins, E.T. (1996). Knowledge activation: Accessibility, applicability, and salience. In. E.T. Higgins & A.W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 133-168). New York: Guilford Press.

Higgins, E.T., & King, G.A. (1981). Accessibility of social constructs: Information-processing consequences of individual and contextual variables. In M. Cantor & J.F. Kihlstrom (Eds.), *Personality, cognition, and social interaction* (pp. 69-121). Hillsdale, NJ.: Erlbaum.

Hirayama, T (1981). Non-smoking wives of heavy smokers have a higher risk of lung cancer: a study from Japan. *Bristish Medical Journal*, 282, 183–5.

Hoffman, L.H., Glynn, C.J., Huge, M.E., Sietman, R.B., & Thomson, T. (2007). The role of communication in public opinion processes: Understanding the impacts of intrapersonal, media, and social filters. *International Journal of Public Opinion Research*, 19 (3), 287-312.

Holm, J.D., & Robinson, J.P. (1978). Ideological identification and the American voter. *Public Opinion Quarterly*, 42, 235-246.

Huckfeldt, R. (1983). Social contexts, social networks, and urban neighborhoods: Environmental constraints on friendship choice. *The American Journal of Sociology*, 89 (3), 651-669.

Huckfeldt, R., Beck, P.A., Dalton, R.J., Levine, J., & Morgan, W. (1998). Ambiguity, distorted messages, and nested environmental effects on political communication. *The Journal of Politics*, 60 (4), 996-1030.

Huckfeldt, R., Beck, P.A., Dalton, R.J., & Levine, J. (1995). Political environments, cohesive

social groups, and the communication of public opinion. *American Journal of Political Science*, 39 (4), 1025-1054.

Huckfeldt, R., & Sprague, J. (1987). Networks in context: The social flow of political information. *The American Political Science Review*, 81 (4), 1197-1216.

Huckfeldt, R., Sprague, J., & Levine, J. (2000). The dynamics of collective deliberation in the 1996 election: Campaign effects on accessibility, certainty, and accuracy. *The American Political Science Review*, 94 (3), 641-651.

Huckfeldt, R., Johnson, P.E., & Sprague, J. (2002). Political environments, political dynamics, and the survival of disagreement. *The Journal of Politics*, 64 (1), 1-21.

Huckfeldt, R., Sprague, J., & Levine, J. (2000). The dynamics of collective deliberation in the 1996 election: Campaign effects on accessibility, certainty, and accuracy. *The American Political Science Review*, 94 (3), 641-651.

Hyman, H.H. (1968). Reference groups. In Sills, D. (Eds), *International encyclopedia of the social sciences* (pp.353-359). New York: Free Press.

Hyman, H.H., & Singer, E. (1968). *Readings in reference group theory and research*. New York: Free Press.

Iyengar, S. (1991). *Is anyone responsible? How television frames political issues*. Chicago: University Chicago Press.

Iyengar, S., & Kinder, D.R. (1987). *News that matters*. Chicago: Chicago University Press.

Iyengar, S., Kinder, D.R., Peters, M.D., & Krosnick, J.A. (1984). The evening news and presidential evaluations. *Journal of Personality and Social Psychology*, 46 (4), 778-787.

Iyengar, S., Peters, M.D., & Kinder, D.R. (1982). Experimental demonstrations of the "not-so-minimal" consequences of television news program. *The American Political Science Review*, 76 (4), 848-858.

Iyengar, S., & Simon, A. (1993). News coverage of the Gulf crisis and public opinion. *Communication Research*, 20 (3), 365-383.

Jaccard, J., & Guilamo-Ramos, V. (2002). Analysis of variance frameworks in clinical child and adolescent psychology: Basic issues and recommendations. *Journal of Clinical Child and Adolescent Psychology*, 31, 130-146.

Jaccard, J., & Wan, C.K. (1996). LISREL approaches to interaction effects in multiple regression. Thousand Oaks, CA: Sage.

Jost, J.T. (2006). The end of the end of ideology. *American Psychologist*, 61 (7), 651-670.

Jost, J.T., Federico, C.M., & Napier, J.L. (2009). Political ideology: Its structure, functions and elective affinities. *Annual Review of Psychology*, 60, 307-337.

Jacoby, W.G. (1986). Levels of conceptualization and reliance on the liberal-conservative continuum. *The Journal of Politics*, 48 (2), 423-432.

Jacoby, W.G. (1988). The impact of party identification on issue attitudes. *American Journal of Political Science*, 32, 643-661.

Jacoby, W.G. (1991). Ideological identification and issue attitudes. *American Journal of Political*

Science, 35 (1), 178-205.

Jennings, M.K. (1992). Ideological thinking among mass publics and political elites. The *Public Opinion Quarterly*, 56 (4), 419-441.

Judd, C.M., Drake, R.A., Downing, J.W., & Krosnick, J.A. (1991). The dynamic properties of attitude structures: Context-induced response facilitation and polarization. *Journal of Personality and Social Psychology*, 60 (2), 193-202.

Judd, C.M., Krosnick, J.A., & Millburn, M.A. (1981). Political involvement and attitude structure in the general public. *American Sociological Review*, 46 (5), 660-669.

Katz, E., & Lazarsfeld, P.F. (1955). *Personal influence: The part played by people in the flow of mass communication*. Glencoe, IL: Free Press.

Kelley, S., & Mirer, T.W. (1974). The simple act of voting. *The American Political Science Review*, 68 (2), 572-591.

Kenny, C.B. (1994). The microenvironment of attitude change. *The Journal of Politics*, 56 (3), 715-728.

Kenny, C. (1998). The behavioral consequences of political discussion: Another look at discussant effects on vote choice. *The Journal of Politics*, 60 (1), 231-244.

Kim, S.-H., Scheufele, D.A., & Shanahan (2002). Think about it this way: Attribute agenda-setting function of the press and the public's evaluation of a local issue. *Journalism and Mass Communication Quarterly*, 79 (1), 7-25.

Kim, J., Wyatt, R.O., & Katz, E. (1999). News, talk, opinion, participation: The part played by conversation in deliberative democracy. *Political Communication*, 16, 361-385.

Kinder, D.R., & Kiewiet, D.R. (1979). Economic discontent and political behavior: The role of personal grievances and collective economic judgments in congressional voting. *American Journal of Political Science*, 23 (3), 495-527.

King, P. (1997). The press, candidate images, and voter perceptions. In M. McCombs, D. Shaw, & D. Weaver (Eds.), *Communication and democracy: Exploring the frontiers in agenda-setting theory* (pp. 29-40). Mahwah, NJ: Erlbaum.

Kiousis, S., Bantimaroudis, P., & Ban, H. (1999). Candidate image attributes: Experiments on the substantive dimension of second level agenda setting *Communication Research*, 26 (4), 414-428.

Klapper, J. (1960). *The effects of mass communication*. New York: Free Press.

Knight, K. (1985). Ideology in the 1980 Election: Ideological sophistication does matter. *The Journal of Politics*, 47 (3), 828-853.

Krosnick, J.A., & Kinder, D.R. (1990). Altering the foundations of support for president through priming. *The American Political Science Review*, 84 (2), 497-512.

Krosnick, J.A., & Brannon, L.A. (1993). The impact of the Gulf war on the ingredient of presidential evaluations: Multidimensional effects of political involvement. *The American Political Science Review*, 87 (4), 963-975.

Kunda, Z. (1990). The case of motivated reasoning. *Psychological Bulletin*, 108 (3), 480-498.

Lang, K., & Lang, G.E. (1966). The mass media and voting. In B. Berelson and M. Janowitz (eds.), *Reader in Public Opinion and Communication*, 2nd ed., New York, Free Press.

Lau, R.R. (1989). Individual and contextual influences on group identification. *Social Psychology Quarterly*, 52 (3), 220-231.

Lau, R.R., Brown, T.A., & Sears, D.O. (1978). Self-interest and civilians' attitudes toward the Vietnam war. *The Public Opinion Quarterly*, 42 (4), 464-483.

Lau, R.R., & Heldman, C. (2009). Self-interest, symbolic attitudes, and support for public policy: A multilevel analysis. *Political Psychology*, 30 (4), 513-537.

Lau, R.R., & Sears, D.O. (1981). Cognitive links between economic grievance and political responses. *Political Behavior*, 3 (4), 279-302.

Lazarsfeld, P.F., Berelson, B., & Gaudet, H. (1944). *The People's Choice*. New York: Columbia University Press.

Lazarsfeld, P.F., & Merton, R.K. (1948). Mass communication, popular taste, and organized social action. In L. Bryson (Ed.), *The communication of ideas* (pp. 95-118), New York: Harper.

Lodge, M., & Hamill, R. (1986). A partisan schema for political information processing. *American Political Science Review*, 80 (2), 505-520.

Lodge, M., McGraw, K.M., & Stroh, P. (1989). An impression-driven model of candidate evaluation. *American Political Science Review*, 83 (2), 399-419.

Lodge, M., Steenbergen, M.R., & Brau, S. (1995). The responsive voter: Campaign information and the dynamics of candidate evaluation. *The American Political Science Review*, 89 (2), 309-326.

Lord, C.G., Ross, L., & Lepper, M.R. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, 37 (11), 2098-2109.

Luttbeg, N.R., & Gant, M.M. (1985). The failure of liberal/conservative ideology as a cognitive structure. *The Public Opinion Quarterly*, 49 (1), 80-93.

MacKuen, M., & Brown, C. (1987). Political context and attitude change. *American Political Science Review*, 81, 471-490.

Matthes, J., Wirth, W., & Schemer, C. (2007). Measuring the unmeasurable? Toward operationalizing on-line and memory-based political judgments in surveys. *International Journal of Public Opinion Research*, 19 (2), 247-257.

McCombs, M., Llamas, J.P., Lopez-Escobar, E., & Rey, F. (1997). Candidate images in spanish elections: Second-level agenda-setting effects. *Journalism & Mass Communication Quarterly*, 74 (4), 703-717.

McCombs, M., Lopez-Escobar, E., & Llamas, J.P. (2000). Setting the agenda of attributes in the 1996 Spanish General Election. *Journal of Communication*, 50 (2), 77-92.

McCombs, M.E., & Reynolds, A. (2002). News influence on our pictures on the world. In J. Bryant & D. Zillmann (Eds.), *Media effects. Advances in theory and research* (pp. 1-18. Mahwah, NJ: Lawrence Erlbaum.

McCombs, M.E., & Shaw, D.L. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly*, 36, 176-187.

McGraw, K.M. (2000). Contribution of the cognitive approach to political psychology. *Political Psychology*, 21 (4), 805-832.

McGraw, K.M., & Ling, C. (2003). Media priming of presidential and group evaluations. *Political Communication,* 20, 23-40.

McGraw, K.M., Lodge, M., & Stroh, P. (1990). On-line processing in candidate evaluation: The effect of issue order, issue importance, and sophistication. *Political Behavior*, 12 (1), 41-58.

McLeod, J.M., Becker, L.B., & Byrnes, J.E. (1974). Another look at the agenda-setting function of the press. *Communication Research*, 1 (2), 131-166.

McLeod, J.M., Scheufele, D.A., & Moy, P. (1999). Community, communication, and participation: The role of mass media and interpersonal discussion in local political participation. *Political Communication*, 16, 315-336.

McQuail, D. (2000). *McQuail's mass communication theory*. London, Thousand Oaks: Sage Publications.

Medici, M., Antonietti, A., Pasat, I., & Arroyo, E. (2006/2007). *Laboratorio di Project Management. Proibizione del fumo nei locali pubblici.* Lavoro di gruppo svolto non pubblicato. Università della Svizzera Italiana.

Meier, D. (2003). *Die Tabakgegner in der Schweiz 1950-1990*. unpublizierte Lizentiatarbeit. Universität Friburg (CH).

Mendelsohn, M. (1996). The media and interpersonal communications: The priming of issues, leaders, and party identification. *The Journal of Politics*, 58 (1), 112-125.

Miller, W.E. (1991). Party identification, realignment, and party voting: Back to the basics. *The American Political Science Review*, 85 (2), 557-568.

Miller, J.M., & Krosnick, J.A. (2000). News media impact on the ingredients of presidential evaluations: Politically knowledgeable citizens are guided by trusted source. *American Journal of Political Science*, 44 (2), 301-315.

Miller, W.E., & Shanks, J.M. (1982). Policy directions and presidential leadership: Alternative interpretations of the 1980 presidential election. *British Journal of Political Science*, 12 (3), 299-356.

Mutz (1998). *Impersonal influence: How perceptions of mass collectives affect political attitudes*. Cambridge, MA: Cambridge University Press.

Mutz, D.C., & Mondak, J.J. (2006). The workplace as a context for cross-cutting political discourse. *The Journal of Politics*, 68 (1), 140-155.

Nelson, T.E., Clawson, R.A., & Oxley, Z.M. (1997). Media framing of a civil liberties conflict and its effect on tolerance. *The American Political Science Review*, 91 (3), 567-583.

Nelson, T.E., Oxley, Z.M., & Clawson, R.A. (1997). Toward a psychology of framing effects. *Political Behavior*, 19 (3), 221-246.

Neumann, W.R. (1990). The threshold of public attention. *Public Opinion Quarterly*, 54, 159-176.

Newcomb, T.M. (1968). Attitude development as a function of reference groups: The Bennington study. In H.H. Hyman & E. Singer (Eds.), *Readings in reference group theory and research*. New York: The Free Press.

Nieuwbeerta, P. & Flap, H. (2000). Crosscutting social circles and political choice. Effects of personal network composition on voting behavior in The Netherlands. *Social Networks*, 22, 313-335.

Nisbet, E.C., (2005). The engagement model of opinion leadership: Testing validity within a European context. *International Journal of Public Opinion Research*, 18 (1), 3-30.

Noelle-Neumann, E. (1993). *The Spiral of silence: Public opinion – Our social skin* (2nd ed.). Chicago: University of Chicago Press.

O'Keefe, D.J. (1990). *Persuasion: Theory and practice*. Newbury Park, CA: Sage.

Ouzouf, M. (1988). "Public opinion" at the end of the old regime. *The Journal of Modern History*, 60, 1-21.

Pan, Z., & Kosicki, G.M. (1997). Priming and media impact on the evaluations of the president's performance. *Communication Research*, 24 (1), 3-30.

Peter, J. (2002). Medien-Priming – Grundlagen, Befunde und Forschungstendenzen. *Publizistik*, 47 (1), 21-44.

Price, V. (1992). *Public Opinion*. Thousand Oaks: Sage.

Price, V., Cappella, J., & Nir, L. (2002). Does disagreement contribute to more deliberative opinion? *Political Communication,* 19 (1), 95–112.

Price, V., & Roberts, D.F. (1987). Public opinion processes. In C. Berger & S. Chaffee (Eds.), *Handbook of Communication Science* (781-816). Newbury Park, CA: Sage.

Price, V., & Tewksbury, D. (1997). News values and public opinion: A theoretical account of media priming and framing. In G. A. Barett & F. J. Boster (Eds.), *Progress in communication sciences: Advances in persuasion* (Vol. 13, pp. 173–212). Greenwich, CT: Ablex.

Price, V., Tewksbury, D., & Powers, E. (1997). Switching trains of thought: The impact of news frames on readers' cognitive responses. *Communication Research*, 24 (5), 481-506.

Repace, J.L., & Lowrey, A.H. (1980). Indoor air pollution, tobacco smoke, and public health. *Science*, 208, 464-474.

Rhee, J.W. (1997).Strategy and issue frames in election campaign coverage: A social cognitive account of framing effects. *Journal of Communication*, 47 (3), 26-48.

Robinson, J.P., & Levy, M.R. (1986). Interpersonal communication and news comprehension. *The Public Opinion Quarterly*, 50 (2), 160-175.

Roessler, P. (1999). The individual agenda-designing process. *Communication Research*, 26 (6), 666-700.

Roessler, P. (2008). Agenda-setting, framing and priming. In W. Donsbach and M.W. Traugott

(Eds), *The SAGE handbook of public opinion research* (pp. 205-217). London: Sage Publications.

Rugg, D., & Cantril, H. (1940). Analysis of poll results. *The Public Opinion Quarterly*, 4 (2), 327-330.

Scheufele, D.A. (1999). Framing as a theory of media effects. *Journal of Communication*, 49, 101-120.

Scheufele, D.A. (2000). Agenda-setting, priming, and framing revisited: Another look at cognitive effects of political communication. *Mass Communication and Society*, 3, 297-316.

Scheufele, D.A., & Tewksbury, D. (2007). Framing, agenda-setting, and priming: The evolution of three media effects models. *Journal of Communication*, 57, 9-20.

Schmitt-Beck, R. (2003). Mass communication, personal communication and vote choice: The filter hypothesis of media influence in comparative perspective. *British Journal of Political Science*, 33, 233-259.

Sciarini, P., & Kriesi, H. (2003). Opinion stability and change during an electoral campaign: Results from the 1999 Swiss election panel study. *International Journal of Public Opinion Research*, 15 (4), 432-453.

Sears, D.O., (1993). Symbolic politics: A socio-psychological theory. In S. Iyengar & W.J. McGuire (Eds.), *Explorations in political psychology* (pp. 113-149), Durham, NC: Duke University Press.

Sears, D.O., & Citrin, J. (1985). *Tax revolt: Something for nothing in California*. Cambridge, MA: Harvard University Press.

Sears, D.O., & Funk, C.L. (1991). The role of self-interest in social and political attitudes. In M.P. Zanna (Ed.), *Advances in experimental social psychology* (pp. 2-91), New York: Academic Press.

Sears, D.O., Hensler, C.P., & Speer, L.K. (1979). Whites' opposition to "busing": Self-interest or symbolic politics? *The American Political Science Review*, 73 (2), 369-384.

Sears, D.O., Lau, R.R., Tyler, T.R:, & Allen, H.M. (1980). Self-interest vs symbolic politics in policy attitudes and presidential voting. *The American Political Science Review*, 74 (3), 670-684.

Sears, D.O., Tyler, T.R., Citrin, J., & Kinder, D.R. (1978). Political system support and public response to energy crisis. *American Journal of Political Science*, 22 (1), 56-82.

Shaefer, T., & Weimann, G. (2005). Agenda building, agenda setting, priming, individual voting intentions, and the aggregate results: An analysis of four Israeli elections. *Journal of Communication*, 55 (2), 347-365.

Shani, D. (2006). Knowing your colors: Can knowledge correct for partisan bias in political perceptions? Paper presented at the annual meeting of the Midwest Political Science Association, Palmer House Hilton, Chicago, Illinois. Retrieved from http://www.allacademic.com/meta/p141163_index.html

Shen, F. (2004). Chronic accessibility and individual cognitions: Examining the effects of

message frames in political advertisements. *Journal of Communication*, 54 (1), 123-137.

Sherif, M. (1936). *The psychology of social norms*. New York: Harper Collins.

Sniderman, P.M., & Theriault, S.M. (2004). The structure of political argument and the logic of issue framing. In W.E. Saris & P.M. Sniderman (Eds.), *Studies in Public Opinion* (pp. 133-165). Princeton, NJ: Princeton University Press.

Stone, G.C., & McCombs, M.E. (1981). Tracing the time lag in agenda-setting. *Journalism Quarterly*, 58 (1), 51-55.

Taber, C., & Lodge, M. (2000). Three Steps toward a Theory of Motivated Political Reasoning. In A. Lupia, M.D. McCubbins, and S.L. Popkin (eds.), *Elements of Reason: Cognition, Choice, and the Bounds of Rationality* (pp. 183-213). Cambridge: Cambridge University Press.

Taber, C.S., & Lodge, M. (2006). Motivated Skepticism in the evaluation of political beliefs. *American Journal of Political Science*, 50 (3), 755-769.

Taber, C.S., Lodge, M., & Glathar, J. (2001). The motivated construction of political judgments. In J.H. Kuklinski (ed.), *Citizens and Politics: Perspectives from Political Psychology* (pp. 198-226), Cambridge: Cambridge University Press.

Tourangeau, R., & Raskinski, K.A. (1988). Cognitive processes underlying context effects in attitude measurement. *Psychological Bulletin*, 103 (3), 299-314.

Tourangeau, R., Rasinski, Bradburn, N., & D'Andrade, R. (1989). *Carryover effects in attitude surveys. Public Opinion Quarterly*, 53, 495-524.

Trichopoulos, D, Kalandidi, A, Sparros, L, & MacMahon, B (1981). Lung cancer and passive smoking. *International Journal of Cancer*, 1981, 27, 1-4.

Valentino, N.A. (1999). Crime news and the priming of racial attitudes during evaluations of the president. *Public Opinion Quarterly*, 63, 293-320.

Valentino, N.A., Beckmann, M.N., & Buhr, A. (2001). A spiral of cynicism for some: The contingent effects of campaign news frames on participation and confidence in government. *Political Communication*, 18, 347-367.

Valkenburg, P.M., Semetko, H.A., & de Vreese, C.H. (1999). The effects of news frames on readers' thoughts and recall. *Communication Research*, 26 (5), 550-569.

Viscusi, W.K. (1992). *Smoking: Making the Risky Decision*. New York: Oxford University Press.

Wanta, W., & Hu, Y.-W. (1994). Time-lag differences in the agenda-setting process: An examination of five news media. *International Journal of Public Opinion Research*, 6 (3), 225-240.

Weaver, D.H., McCombs, M.E., & Shaw, D.L. (2004). Agenda-setting research: Issues, attributes, and influences. In L.L. Kaid (Ed.), *The Handbook of Political Communication research* (pp. 257-283). Mahwah, NJ: Erlbaum.

Winter, J., & Eyal, C. (1981). Agenda setting for the civil rights issue. *Public Opinion Quarterly*, 45, 376-383.

Willnat, L., & Zhu, J.-H. (1996). Newspaper coverage and public opinion in Hong Kong: A time-

series analysis of media priming. *Political Communication*, 12, 231-346.

Wolpert, R.M., & Gimpel, J.G. (1998). Self-interest, symbolic politics, and public attitudes toward gun control. *Political Behavior*, 20 (3), 241-262.

Wyer, R. & Srull, T. (1989). *Memory and cognition in its social context*. Hillsdale, NJ: Erlbaum.

Wynder, E. L., & Graham, E. A. (1950). Tobacco smoking as a possible etiologic factor in bronchiogenic carcinoma. A study of six hundred and eighty-four proved cases. *Journal of American Medical Association*, 143, 329-336.

Zaller, J. (1992). *The Nature and Origins of Mass Opinion*. Cambridge: Cambridge University Press.

Zaller, J. (1996). The myth of massive media impact revived: New support for a discredited idea. In D. Mutz, R. Brody, & P. Sniderman (Eds.), *Political persuasion and attitude change* (pp. 17-79). Ann Arbor: University of Michigan Press.

Zaller, J., & Feldman, S. (1992). A simple theory of the survey response: Answering questions versus revealing preferences. *American Journal of Political Science*, 36 (3), 579-616.

ANNEX A ADDITIONAL TABLES

Table 15: Logistic regression: general opinion regressed onto beliefs about the smoking ban

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	-1.53	.22			-.81	.45		
Health of non smokers will improve	1.74*	5.69	3.25	9.97	1.53**	4.64	2.48	8.68
Smoking will generally decrease	.76*	2.14	1.17	3.90	.42	1.53	.81	2.90
Some smokers will stop smoking	.02	1.02	.56	1.85	-.20	.82	.44	1.52
Owners will not earn less revenue	1.45**	4.28	2.37	7.75	.57	1.76	.91	3.40
Prices will not increase	-.08	.92	.51	1.67	.02	1.02	.54	1.91
It is not a violation of freedom	1.30**	3.66	2.04	6.55	2.35**	10.43	5.18	20.99

Note: * $p < .05$; ** $p < .001$

Table 16: Multinomial logistic regression: Salience of pro arguments regressed onto general opinion

	W2				W 3			
Model 1	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	.35*	1.42			1.05	2.86		
Health	.70	2.01	1.01	4.01	.60	1.83	.87	3.86
Bother	.41	1.50	.63	3.57	.46	1.58	.65	3.84
Respect	.82	2.28	.92	5.62	.29	1.34	.56	3.24
Passive smoking	.81	2.24	.85	5.88	.83	2.29	.77	6.85
Other	Ref.				Ref.			
Model 2								
Constant	1.15	3.17			1.88	6.55		
Health	-.11	.90	.41	1.96	-.23	.80	.32	2.02
Bother	-.40	.67	.26	1.73	-.37	.69	.24	1.96
Respect	.02	1.02	.38	2.71	-.54	.59	.21	1.66
Passive smoking	Ref.				Ref.			
Other								
Model 3								
Constant	1.17	3.22			1.35	3.84		
Health	-.12	.88	.44	1.79	.31	1.36	.70	2.65
Bother	-.42	.66	.27	1.60	.16	1.18	.52	2.67
Respect	Ref.				Ref.			
Passive smoking								
Other								
Model 4								
Constant	.75	2.12			1.51	4.52		
Health	.29	1.34	.69	2.60	.15	1.16	.59	2.27
Bother	Ref.				Ref.			
Respect								
Passive smoking								

Other								

Note: * p < .05; ** p < .001; controlled for salience of con arguments

Table 17: Multinomial logistic regression: Salience of con arguments regressed onto general opinion

	W2				W 3			
Model 1	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	1.72	5.56			2.98	19.78		
Freedom	-1.31**	.27	.16	.44	-2.24**	.11	.05	.23
Economy	-.43	.65	.27	1.56	-.21	.81	.10	6.75
Other	-1.37**	.26	.14	.46	-1.93**	.15	.06	.33
No Reason	Ref.				Ref.			
Model 2								
Constant	.35	1.42			1.05	2.86		
Freedom	.06	1.06	.60	1.88	-.31	.73	.44	1.24
Economy	.93**	2.55	1.02	6.37	1.72	5.60	.73	43.22
Other	Ref.				Ref.			
No Reason								
Model 3								
Constant	1.28	3.60			2.77	16.03		
Freedom	-.88*	.42	.18	.99	-2.03*	.13	.02	.99
Economy	Ref.				Ref.			
Other								
No Reason								

Note: * p < .05; ** p < .001; controlled for salience of con arguments

Table 18: Logistic regression: Beliefs about the smoking ban regressed onto perceived support

	Wave 2				Wave 3			
Health of non-smokers will improve	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	.60	1.81			.63	1.87		
Perceived Support of friends	1.42**	4.14	2.61	6.58	1.52**	4.59	2.82	7.48
Smoking will decrease generally								
Constant	.21	1.23			.13	1.14		
Perceived Support of friends	.78**	2.18	1.45	3.26	.80**	2.23	1.46	3.41
Owners will not earn less revenue								
Constant	.05	1.05			.50	1.65		
Perceived Support of friends	1.56**	4.76	3.12	7.25	1.35**	3.87	2.42	6.19
It is not a violation of freedom								
Constant	-.35	.71			-.22	.80		
Perceived Support of friends	1.12**	3.07	2.05	4.62	1.11**	3.03	1.98	4.62

Note: * $p < .05$; ** $p < .001$

Table 19: Multinomial logistic regression: Salience of con arguments regressed onto Perceived Support

	Wave 2				Wave 3			
Ref. = No Reason	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Economy								
Intercept	-1.91				-2.05			
Perceived Support of Friends	-.01	1.00	.44	2.24	-.36	.70	.22	2.19
Freedom								
Intercept	-.35				.33			
Perceived Support of Friends	-.46	.63	.39	1.00	-.49	.62	.37	1.02
Other Arguments								
Intercept	-.66				.03			
Perceived Support of Friends	-.93*	.40	.23	.68	-.76*	.47	.27	.81

Note: * $p < .05$; ** $p < .001$

Table 20: Logistic regression: General opinion regressed onto perceived support

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	-2.01	.13			-.10	.90		
Beliefs								
Health of non-smokers will improve	1.65**	5.22	2.67	10.22	1.17*	3.23	1.42	7.36
Smok. will decrease gen. decrease	.88*	2.40	1.26	4.59	.08	1.08	.50	2.33
Owners will not earn less revenue	1.34**	3.80	1.97	7.35	.45	1.56	.72	3.41
It is not a violation of freedom	.86*	2.37	1.20	4.67	1.92**	6.80	3.06	15.13
Salience								
Freedom	-1.00*	.37	.17	.79	-2.40**	.09	.03	.28
Economy	-.38	.68	.18	2.58	-.72	.49	.03	6.82
Other	-.64	.53	.22	1.28	-1.79*	.17	.05	.55
No Reason	Ref.				Ref.			
Perceived Support								
Perceived Support of friends	1.91**	6.75	3.54	12.89	2.60**	13.49	6.34	28.70

Note: * $p < .05$; ** $p < .001$

Table 21: Logistic regression: Belief (Health of non-smokers will improve) regressed onto predisposition

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	-.34	.71			.84	2.31		
Self-interest								
Non-Smokers	.86**	2.37	1.66	3.39	1.23**	3.40	2.18	5.32
Bothered in smoky environment	.41**	1.51	1.29	1.76	.19	1.21	1.00	1.48
Political Predisposition								
Conservative Right	Ref.				Ref.			
Moderate Right	-.07	.94	.45	1.94	-.76	.47	.16	1.34
Left	.59	1.81	.79	4.13	-.19	.83	.27	2.56
Don't know	-.28	.76	.39	1.47	-.73	.48	.18	1.31

Note: * $p < .05$; ** $p < .001$

Table 22: Logistic regression: Belief (Smoking will reduce generally) regressed onto predisposition

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	.00	1.00			.55	1.73		
Self-interest								
Non-Smokers	.05	1.05	.77	1.43	.28	1.32	.91	1.91
Bothered in smoky environment	.19*	1.21	1.06	1.39	.13	1.14	.97	1.34
Political Predisposition								
Conservative Right	Ref.				Ref.			
Moderate Right	.25	1.28	.71	2.32	-.45	.64	.30	1.39
Left	.24	1.27	.68	2.38	-.18	.84	.37	1.88
Don't know	-.13	.88	.51	1.50	-.57	.56	.28	1.16

Note: * $p < .05$; ** $p < .001$

Table 23: Logistic regression: Belief (Owners will not earn less revenue) regressed onto predisposition

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	-1.25	.29			.44	1.55		
Self-interest								
Non-Smokers	1.19**	3.28	2.37	4.54	1.22**	3.39	2.21	5.20
Bothered in smoky environment	.32**	1.37	1.19	1.58	.21*	1.23	1.02	1.49
Political Predisposition								
Conservative Right	Ref.				Ref.			
Moderate Right	.45	1.56	.84	2.89	-.72	.49	.19	1.24
Left	1.29**	3.62	1.77	7.37	.27	1.30	.46	3.68
Don't know	.39	1.48	.85	2.57	-.57	.56	.23	1.36

Note: * p < .05; ** p < .001

Table 24: Logistic regression: beliefs (It is not a violation of freedom) regressed onto predisposition

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	-2.50	.08			-1.24	.29		
Self-interest								
Non-Smokers	.76**	2.13	1.57	2.90	.94**	2.55	1.77	3.68
Bothered in smoky environment	.52**	1.68	1.46	1.94	.31**	1.36	1.16	1.61
Political Predisposition								
Conservative Right	Ref.				Ref.			
Moderate Right	.55	1.73	.97	3.09	.15	1.17	.57	2.37
Left	.97*	2.65	1.42	4.94	-.03	.97	.46	2.03
Don't know	.63*	1.88	1.11	3.18	.08	1.09	.57	2.09

Note: * $p < .05$; ** $p < .001$

Table 25: Multinomial logistic regression: Salience of con arguments regressed onto predisposition

	Wave 2				Wave 3			
Ref. = No Reason	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Economy								
Intercept	-2.04				-.87			
Non-Smokers	-.69*	.50	.29	.87	-1.06*	.35	.14	.84
Bothered in smoky envt	.16	1.18	.87	1.59	-.42*	.66	.45	.95
Moderate Right	.33	1.40	.52	3.78	.45	1.57	.16	15.23
Left	.16	1.17	.39	3.49	1.12	3.07	.33	28.80
Don't know	-.28	.75	.30	1.92	.78	2.17	.27	17.72
Freedom								
Intercept	.20				1.43			
Non-Smokers	-.70**	.50	.35	.71	-.68*	.51	.33	.78
Bothered in smoky envt	-.18*	.84	.72	.98	-.31*	.73	.60	.89
Moderate Right	.32	1.37	.70	2.68	.13	1.14	.53	2.48
Left	.61	1.83	.91	3.68	.46	1.59	.71	3.57
Don't know	-.18	.84	.45	1.55	-.09	.91	.45	1.87
Other Arguments								
Intercept	-.36				.64			
Non-Smokers	-.88**	.42	.27	.63	-.98**	.38	.24	.60
Bothered in smoky envt	-.17	.84	.70	1.01	-.19	.82	.66	1.03
Moderate Right	.35	1.42	.61	3.31	.26	1.29	.52	3.19
Left	.56	1.75	.73	4.23	.42	1.52	.59	3.91
Don't know	-.02	.98	.45	2.14	.21	1.23	.54	2.82

Table 26: Logistic Regression: General opinion regressed onto predisposition–Wave 2

	Wave 2			
	Est.	Exp (B)	95% CI	
Constant	-2.32	.10		
Beliefs				
Health of non-smokers will improve	1.31**	3.72	1.79	7.74
Smok. will decrease gen. decrease	.89*	2.43	1.19	4.96
Owners will not earn less revenue	1.07*	2.90	1.38	6.09
It is not a violation of freedom	.76*	2.14	1.01	4.54
Salience				
Freedom	-.81	.45	.19	1.04
Economy	-.41	.66	.15	2.86
Other	-.31	.74	.28	1.95
No Reason	Ref.			
Perceived Support				
Perceived Support of friends	1.78**	5.94	2.95	11.94
Self-Interest				
Smoking Status	1.28*	3.58	1.72	7.45
Feeling bothered	.34*	1.40	1.03	1.90
Political Predisposition				
Moderate Right	-.62	.54	.12	2.35
Left	-1.38	.25	.06	1.11
Don't Know	-1.29	.28	.07	1.05
Conservative Right	Ref.			

* $p < .05$; ** $p < .001$

Table 27: Logistic Regression: General opinion regressed onto predisposition–Wave 3

	Wave 3			
	Est.	Exp (B)	95% CI	
Constant	.27	1.30		
Beliefs				
Health of non-smokers will improve	1.01*	2.73	1.14	6.56
Smok. will decrease gen. decrease	.29	1.34	.58	3.09
Owners will not earn less revenue	.22	1.25	.51	3.03
It is not a violation of freedom	1.80**	6.07	2.51	14.65
Salience				
Freedom	-2.46**	.09	.03	.29
Economy	-0.96	.38	.03	5.20
Other	-1.65*	.19	.06	.68
No Reason	Ref.			
Perceived Support				
Perceived Support of friends	2.84**	17.19	7.51	39.34
Self-Interest				
Smoking Status	1.05*	2.86	1.24	6.60
Feeling bothered	-.24	.79	.54	1.15
Political Predisposition				
Moderate Right	-.37	.69	.16	3.01
Left	.02	1.02	.22	4.72
Don't Know	.01	1.01	.26	3.99
Conservative Right	Ref.			

* $p < .05$; ** $p < .001$

Table 28: Logistic regression: Perceived support regressed onto interpersonal communication

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	1.29	3.64			1.42	4.12		
Discussion frequency with opponents								
Never	Ref.				Ref.			
One time	-.65	.52	.26	1.03	-.52	.60	.30	1.20
Several times	-.81**	.45	.28	.72	-.87**	.42	.26	.69
Discussion frequency with supporters								
Never	Ref.				Ref.			
One time	-.13	.88	.46	1.68	.08	1.08	.49	2.39
Several times	.91**	2.48	1.54	4.00	.94**	2.55	1.58	4.12

Note: * p < .05; ** p < .001

Table 29: Logistic regression: Beliefs (Health of non-smoker will increase) regressed onto general newspaper exposure

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	1.64	5.13			1.71	5.52		
Time reading newspapers in general	.00	1.00	.99	1.01	.00	1.00	.99	1.01

Note: * p < .05; ** p < .001

Table 30: Logistic regression: Beliefs (Health of non-smoker will increase) regressed onto exposure to political articles

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	1.69	5.43			1.63	5.10		
Time reading political articles	-.02	.98	.96	1.01	-.01	.99	.97	1.02

Note: * p < .05; ** p < .001

Table 31: Logistic regression: Beliefs (Smoking will generally decrease) regressed onto general newspaper exposure

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	.75	2.12			.70	2.02		
Time reading newspapers in general	.00	1.00	.99	1.01	.00	1.00	.99	1.01

Note: * p < .05; ** p < .001

Table 32: Logistic regression: Beliefs (Smoking will generally decrease) regressed onto exposure to political articles

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	.82	2.27			.76	2.14		
Time reading political articles	.00	1.00	.98	1.02	.00	1.00	.98	1.02

Note: * p < .05; ** p < .001

Table 33: Logistic regression: Beliefs (Owners will not earn less revenue) regressed onto general newspaper exposure

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	1.09	2.98			1.30	3.67		
Time reading newspapers in general	.00	1.00	.99	1.01	.01	1.01	1.00	1.02

Note: * p < .05; ** p < .001

Table 34: Logistic regression: Beliefs (Owners will not earn less revenue) regressed onto exposure to political articles

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	.98	2.65			1.24	3.46		
Time reading political articles	.03*	1.03	1.00	1.05	.03	1.03	1.00	1.05

Note: * p < .05; ** p < .001

Table 35: Logistic regression: Beliefs (It is not a violation of freedom) regressed onto general newspaper exposure

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	.59	1.80			.52	1.69		
Time reading newspapers in general	.00	1.00	.99	1.00	.00	1.00	.99	1.01

Note: * p < .05; ** p < .001

Table 36: Logistic regression: Beliefs (It is not a violation of freedom) regressed onto exposure to political articles

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	.53	1.70			.51	1.67		
Time reading political articles	-.01	.99	.97	1.01	.01	1.01	.99	1.02

Note: * p < .05; ** p < .001

Table 37: Multinomial logistic regression: Salience of con arguments regressed onto general newspaper exposure

	Wave 2				Wave 3			
Ref. = No Reason	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Economy								
Intercept	-1.77				-2.21			
Time reading newspapers in general	.00	1.00	.98	1.01	.00	1.00	.98	1.02
Freedom								
Intercept	-.66				-.12			
Time reading newspapers in general	.00	1.00	.99	1.01	.00	1.00	1.00	1.01
Other Arguments								
Intercept	-1.39				-.52			
Time reading newspapers in general	.00	1.00	.99	1.01	.00	1.00	.99	1.01

Note: * $p < .05$; ** $p < .001$

Table 38: Multinomial logistic regression: Salience of con arguments regressed onto exposure to political articles

	Wave 2				Wave 3			
Ref. = No Reason	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Economy								
Intercept	-1.82				-2.19			
Time reading political articles	-.01	.99	.96	1.03	-.02	.98	.93	1.04
Freedom								
Intercept	-.69				-.14			
Time reading political articles	.00	1.00	.98	1.02	.01	1.01	.99	1.04
Other Arguments								
Intercept	-1.39				-.57			
Time reading political articles	.00	1.00	.98	1.03	.01	1.01	.99	1.04

Note: * $p < .05$; ** $p < .001$

Table 39: Logistic Regression: General opinion regressed onto general newspaper exposure – Wave 2

	Wave 2			
	Est.	Exp (B)	95% CI	
Constant	-2.05	.13		
Beliefs				
Health of non-smokers will improve	1.73**	5.62	2.84	11.10
Smok. will decrease gen. decrease	.92*	2.50	1.30	4.81
Owners will not earn less revenue	1.22**	3.38	1.73	6.61
It is not a violation of freedom	.96*	2.62	1.31	5.25
Salience				
Freedom	-.97*	.38	.18	.81
Economy	-.56	.57	.15	2.24
Other	-.49	.62	.24	1.55
No Reason	Ref			
Perceived Support				
Perceived Support of friends	1.85**	6.36	3.30	12.24
Media				
Time reading newspapers in general	.00	1.00	.98	1.02

Note: * $p < .05$; ** $p < .001$

Table 40: Logistic Regression: General opinion regressed onto exposure to political articles – Wave 2

	Wave 2			
	Est.	Exp (B)	95% CI	
Constant	-2.34	.10		
Beliefs				
Health of non-smokers will improve	1.84**	6.28	3.12	12.62
Smok. will decrease gen. decrease	1.01*	2.75	1.41	5.37
Owners will not earn less revenue	1.33**	3.79	1.91	7.52
It is not a violation of freedom	.95*	2.59	1.27	5.25
Salience				
Freedom	-.96*	.38	.18	.83
Economy	-.60	.55	.13	2.24
Other	-.34	.71	.28	1.83
No Reason	Ref			
Perceived Support				
Perceived Support of friends	1.83**	6.21	3.19	12.11
Media				
Time reading political articles	.01	1.01	.97	1.05

Note: * p < .05; ** p < .0

Table 41: Logistic Regression: General opinion onto general newspaper exposure – Wave 3

	Wave 3			
	Est.	Exp (B)	95% CI	
Constant	.28	1.32		
Beliefs				
Health of non-smokers will improve	1.15*	3.16	1.34	7.46
Smok. will decrease gen. decrease	.18	1.20	.54	2.66
Owners will not earn less revenue	.52	1.68	.75	3.78
It is not a violation of freedom	2.02**	7.55	3.26	17.50
Salience				
Freedom	-2.71**	.07	.02	.24
Economy	-1.11	.33	.02	5.84
Other	-2.07*	.13	.04	.47
No Reason	Ref			
Perceived Support				
Perceived Support of friends	2.67**	14.43	6.52	31.94
Media				
Time reading newspapers in general	-.01	.99	.97	1.01

Note: * $p < .05$; ** $p < .001$

Table 42: Logistic Regression: General opinion onto exposure to political articles – Wave 3

	Wave 3			
	Est.	Exp (B)	95% CI	
Constant	.52	1.69		
Beliefs				
Health of non-smokers will improve	1.25*	3.47	1.46	8.27
Smok. will decrease gen. decrease	.10	1.11	.49	2.50
Owners will not earn less revenue	.63	1.87	.82	4.26
It is not a violation of freedom	2.00**	7.38	3.16	17.27
Salience				
Freedom	-2.98**	.05	.01	.21
Economy	-1.52	.22	.01	4.00
Other	-2.37*	.09	.02	.39
No Reason				
Perceived Support				
Perceived Support of friends	2.56**	12.91	5.79	28.76
Media				
Time reading political articles	-.03	.97	.93	1.01

Note: * $p < .05$; ** $p < .001$

Table 43: Logistic regression: Beliefs (Health of non-smoker will increase) regressed onto general newspaper exposure – Testing for quadratic effects

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	1.68	5.39			1.62	5.04		
Time reading newspapers in general	.01	1.01	.99	1.02	.00	1.00	.98	1.01
Quadratic: Time reading general	.00*	1.00	1.00	1.00	.00	1.00	1.00	1.00

Note: * p < .05; ** p < .001; independent variables were centered toward the mean to avoid multicolinearity significant value = -2.2124817570642828E-4

Table 44: Logistic regression: Beliefs (Health of non-smoker will increase) regressed onto exposure to political articles– Testing for quadratic effects

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	1.65	5.20			1.58	4.85		
Time reading political articles	.01	1.01	.97	1.05	-.01	.99	.96	1.03
Quadratic: Time reading political	.00	1.00	1.00	1.00	.00	1.00	1.00	1.00

Note: * p < .05; ** p < .001; independent variables were centered toward the mean to avoid multicolinearity

Table 45: Logistic regression: Beliefs (Smoking will generally decrease) regressed onto general newspaper exposure – Testing for quadratic effects

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	.78	2.19			.81	2.25		
Time reading newspapers in general	.00	1.00	.99	1.01	.01	1.01	1.00	1.02
Quadratic: Time reading general	.00	1.00	1.00	1.00	.00	1.00	1.00	1.00

Note: * p < .05; ** p < .001; independent variables were centered toward the mean to avoid multicolinearity

Table 46: Logistic regression: Beliefs (Smoking will generally decrease) regressed onto exposure to political articles – Testing for quadratic effects

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	.80	2.23			.73	2.08		
Time reading political articles	.00	1.00	.97	1.03	-.01	.99	.96	1.02
Quadratic: Time reading political	.00	1.00	1.00	1.00	.00	1.00	1.00	1.00

Note: * p < .05; ** p < .001; independent variables were centered toward the mean to avoid multicolinearity

Table 47: Logistic regression: Beliefs (Owners will not earn less revenue) regressed onto general newspaper exposure – Testing for quadratic effects

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	1.16	3.20			1.47	4.34		
Time reading newspapers in general	.00	1.00	.99	1.02	.01	1.01	.99	1.02
Quadratic: Time reading general	.00	1.00	1.00	1.00	.00	1.00	1.00	1.00

Note: * p < .05; ** p < .001; independent variables were centered toward the mean to avoid multicolinearity

Table 48: Logistic regression: Beliefs (Owners will not earn less revenue) regressed onto exposure to political articles – Testing for quadratic effects

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	1.23	3.43			1.44	4.21		
Time reading political articles	.05*	1.05	1.01	1.08	.03	1.03	.99	1.07
Quadratic: Time reading political	.00	1.00	1.00	1.00	.00	1.00	1.00	1.00

Note: * p < .05; ** p < .001; independent variables were centered toward the mean to avoid multicolinearity

Table 49: Logistic regression: Beliefs (It is not a violation of freedom) regressed onto general newspaper exposure – Testing for quadratic effects

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	.46	1.59			.59	1.80		
Time reading newspapers in general	-.01	.99	.98	1.01	.00	1.00	.99	1.02
Quadratic: Time reading general	.00	1.00	1.00	1.00	.00	1.00	1.00	1.00

Note: * p < .05; ** p < .001; independent variables were centered toward the mean to avoid multicolinearity

Table 50: Logistic regression: Beliefs (It is not a violation of freedom) regressed onto exposure to political articles – Testing for quadratic effects

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	.51	1.66			.59	1.81		
Time reading political articles	.00	1.00	.97	1.03	.02	1.02	.99	1.05
Quadratic: Time reading political	.00	1.00	1.00	1.00	.00	1.00	1.00	1.00

Note: * p < .05; ** p < .001; independent variables were centered toward the mean to avoid multicolinearity

Table 51: Logistic Regression: General opinion onto general newspaper exposure – Wave 2 – Testing for Quadratic Effects

	Wave 2			
	Est.	Exp (B)	95% CI	
Constant	-2.13	.12		
Beliefs				
Health of non-smokers will improve	1.73**	5.62	2.84	11.12
Smok. will decrease gen. decrease	.93*	2.52	1.31	4.87
Owners will not earn less revenue	1.24**	3.45	1.76	6.76
It is not a violation of freedom	.96*	2.61	1.30	5.24
Salience				
Freedom	-.96*	.38	.18	.82
Economy	-.56	.57	.15	2.21
Other	-.50	.61	.24	1.52
No Reason	Ref			
Perceived Support				
Perceived Support of friends	1.86**	6.43	3.33	12.38
Media				
Time reading newspapers in general	-.01	.99	.97	1.02
Quadratic: Time newspapers general	.00	1.00	1.00	1.00

Note: * $p < .05$; ** $p < .001$

Table 52: Logistic Regression: General opinion regressed onto exposure to political articles – Wave 2 – Testing for Quatratic Effects

	Wave 2			
	Est.	Exp (B)	95% CI	
Constant	-2.32	.10		
Beliefs				
Health of non-smokers will improve	1.85**	6.34	3.15	12.78
Smok. will decrease gen. decrease	1.01*	2.74	1.41	5.36
Owners will not earn less revenue	1.35**	3.85	1.93	7.69
It is not a violation of freedom	.95*	2.58	1.27	5.24
Salience				
Freedom	-.95*	.39	.18	.83
Economy	-.60	.55	.13	2.25
Other	-.32	.72	.28	1.86
No Reason	Ref			
Perceived Support				
Perceived Support of friends	1.83**	6.22	3.19	12.13
Media				
Time reading political articles	.00	1.00	.94	1.07
Quadratic: Time reading politics	.00	1.00	1.00	1.00

Note: * p < .05; ** p < .0

Table 53: Logistic Regression: General opinion regressed onto general newspaper exposure – Wave 3 – Testing for Quadratic Effects

	Wave 3			
	Est.	Exp (B)	95% CI	
Constant	-.01	1.00		
Beliefs				
Health of non-smokers will improve	1.14*	3.13	1.32	7.39
Smok. will decrease gen. decrease	.20	1.22	.54	2.73
Owners will not earn less revenue	.51	1.67	.75	3.75
It is not a violation of freedom	2.02**	7.56	3.26	17.54
Salience				
Freedom	-2.71**	.07	.02	.24
Economy	-1.08	.34	.02	6.14
Other	-2.06*	.13	.04	.47
No Reason				
Perceived Support				
Perceived Support of friends	2.67**	14.38	6.50	31.81
Media				
Time reading newspapers in general	-.01	.99	.96	1.01
Quadratic: Time reading general	.00	1.00	1.00	1.00

Note: * $p < .05$; ** $p < .001$

Table 54: Logistic Regression: General opinion regressed onto exposure to political articles – Wave 3 – Testing for Quadratic Effects

	Wave 3			
	Est.	Exp (B)	95% CI	
Constant	.27	1.31		
Beliefs				
Health of non-smokers will improve	1.24*	3.45	1.45	8.24
Smok. will decrease gen. decrease	.10	1.11	.49	2.50
Owners will not earn less revenue	.63	1.87	.82	4.26
It is not a violation of freedom	1.99**	7.32	3.13	17.13
Salience				
Freedom	-2.98**	.05	.01	.21
Economy	-1.51	.22	.01	4.11
Other	-2.37*	.09	.02	.39
No Reason				
Perceived Support				
Perceived Support of friends	2.56**	12.96	5.81	28.92
Media				
Time reading political articles	-.04	.96	.90	1.03
Quadratic: Time reading political	.00	1.00	1.00	1.00

Note: * $p < .05$; ** $p < .001$

Table 55: Logistic regression: Interaction Beliefs X Media regressed onto general opinion

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	-1.44	.24			-.55	.58		
Health of non-smokers will improve (BELHE)	1.70**	5.45	2.26	13.15	.58	1.79	.64	5.04
Smoking will generally decrease (BELSM)	.69	2.00	.83	4.79	.62	1.87	.69	5.04
Owner will not earn less revenue (BELRE)	1.18*	3.26	1.36	7.78	1.10*	3.00	1.12	8.04
It is not a violation of freedom (BELFR)	1.41*	4.10	1.67	10.05	1.97**	7.14	2.56	19.88
Time reading newspapers in general (TimeG)	-.02	.99	.95	1.02	-.01	.99	.96	1.02
TimeG X BELHE	.01	1.01	.98	1.04	0.04	1.04	1.00	1.08
TimeG X BELSM	.01	1.01	.98	1.04	-.01	.99	.96	1.03
TimeG X BELRE	.01	1.01	.98	1.04	-.02	.98	.95	1.02
TimeG X BELFR	.00	1.00	.97	1.03	.01	1.01	.97	1.05

Note: * $p < .05$; ** $p < .001$

Table 56: Logistic regression: Interaction Beliefs X Media regressed onto general opinion

	Wave 2				Wave 3			
	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Constant	-1.98	.14			-1.13	.32		
Health of non-smokers will improve (BELHE)	1.99**	7.29	3.49	15.23	1.43*	4.20	1.87	9.42
Smoking will generally decrease (BELSM)	1.00*	2.73	1.30	5.73	.54	1.72	.78	3.79
Owner will not earn less revenue (BELRE)	1.33**	3.77	1.82	7.79	1.14*	3.13	1.42	6.89
It is not a violation of freedom (BELFR)	1.35*	3.85	1.78	8.33	2.07**	7.91	3.36	18.62
Time reading political articles (TimeP)	.00	1.00	.92	1.09	.02	1.02	.95	1.10
TimeP X BELHE	.00	1.00	.94	1.07	.02	1.02	.95	1.10
TimeP X BELSM	-.01	.99	.92	1.07	-.03	.98	.91	1.05
TimeP X BELRE	.02	1.02	.96	1.09	-.05	.95	.88	1.03
TimeP X BELFR	.01	1.01	.93	1.09	.02	1.02	.94	1.10

Note: * $p < .05$; ** $p < .001$

Table 57: Significant Model Pathway coefficient

	Wave 2				Wave 3			
	Est.	S.E.	CI 95%		Est.	S.E.	CI 95%	
General Opinion								
Wave contingent variable								
Salience Freedom	-.09*	.03	-.16	-.01	-.08**	.02	-.14	-.03
Belief: non-smokers' health	.22*	.05	.10	.34	.11*	.04	.01	.21
Belief: smoking decrease	.07*	.03	.00	.13				
Belief: loss of revenue	.11*	.04	.02	.20				
Belief: freedom violation	.09*	.03	.02	.16	.11**	.03	.04	.17
Perceived Support	.26**	.05	.15	.38	.30**	.05	.18	.42
Smoking Status	.12**	.03	.04	.19				
Variable from previous wave								
General opinion					.30**	.05	.17	.43
Belief: non-smokers' health								
Wave contingent variable								
Smoking	.14**	.04	.05	.24	.11*	.03	.03	.19
Feeling bothered	.05*	.02	.01	.10				
Reading political articles	-.01*	.00	-.01	.00				
Perceived support	.18**	.05	.07	.30	.15**	.04	.04	.26
Disc. one time w. opponents	-.15*	.06	-.29	.00				
Disc. several times w. supporters	.08*	.03	.00	.16				
Variable from previous wave								
Belief: nons-smokers' health					.38**	.05	.25	.50
Belief: smoking decrease								
Wave contingent variable								
Perceived support	.17*	.05	.03	.30	.13*	.05	.00	.26
Variable from previous wave								
Belief: smoking decrease					.34**	.04	.24	.44
Belief: loss of revenue								
Wave contingent variable								
Smoking	.21**	.04	.11	.31	.10*	.04	.02	.19
Feeling bothered	.05*	.02	.00	.10				
Pol. Predis.: Left	.19*	.07	.00	.38				

Table 57: Significant Model Pathway coefficient

	Wave 2				Wave 3			
	Est.	S.E.	CI 95%		Est.	S.E.	CI 95%	
Pol. Predis.: Moderate Right					-.15*	.06	-.30	.01
Perceived Support	.23**	.05	.11	.35	.17**	.05	.06	.29
Disc. several times w. opponent					-.08*	.03	-.16	.01
Variable from previous wave								
Belief: loss of revenue					.26**	.04	.15	.37
Belief: violation of freedom								
Wave contingent variable								
Smoking	.18**	.04	.08	.29	.13*	.04	.00	.21
Feeling bothered	.10**	.02	.06	.15	.04*	.02	-.01	.09
Pol. Predis.: Moderate Right	.22*	.08	.02	.42				
Pol. Predis.: Left	.26*	.08	.05	.47				
Pol. Predis.: Don't know	.19*	.07	.00	.37				
Perceived support	.16*	.05	.04	.29	.13*	.05	.01	.26
Disc. several times w. opponents	-.10*	.04	-.20	.01				
Disc. several times w. supporters	.12*	.04	.02	.22				
Gender	-.08*	.04	-.17	.02				
Age	.00*	.00	-.01	.00				
Education					.02*	.01	-.01	.06
Variable from previous wave								
Belief: violation of freedom					.25**	.04	.14	.35
Salience: freedom					-.19**	.04	-.30	-.08
Salience: other arg. against					-.10*	.05	-.23	.03
Perceived Support								
Wave contingent variable								
Smoking	.19**	.04	.09	.29				
Feeling bothered	.07**	.02	.02	.12	.04*	.02	-.01	.08
Disc. several times w. opponents	-.09*	.04	-.18	.01	-.09*	.03	-.17	-.01
Disc. several times w. supporters	.13**	.04	.04	.22	.12**	.03	.03	.20
Variable from previous wave								
Perceived Support					.32**	.05	.19	.45

Note: * < .05; ** < .001

Table 58: Significant model path coefficients for the multinomial logistic regression of the primary analysis.

	Wave 2				Wave 3			
Ref. Cat. No Reason	Est.	Odd ratio	95% CI		Est.	Odd ratio	95% CI	
Salience Freedom								
Wave contingent variable								
Smoking	-.68*	.51	.27	.96				
Feeling	-.25*	.78	.58	1.03	-.35*	.70	.52	.96
Left	1.01*	2.73	.80	9.29				
Variable from previous wave								
Salience Freedom W2					1.31**	3.69	1.86	7.31
Salience Economy								
Wave contingent variable								
Disc. one time w. supporters					-8.81**	.00	.00	.01
Variable from previous wave								
Salience Economy W2					1.59*	4.90	1.05	22.87
Salience Other								
Wave contingent variable								
Smoking	-.92*	.40	.18	.87	-1.05**	.35	.17	.74
Perceived support	-.67*	.51	.22	1.19				
Disc. several times w. opponents					.59*	1.80	.90	3.62

Table 59: Multinomial logistic regression:Salience of pro arguments regressed onto predisposition

	Wave 2				Wave 3			
Ref. = Health	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Bother								
Intercept	-1.07				-.84			
Gender	-.27	.77	.45	1.31	-.12	.89	.54	1.46
Age	.02*	1.02	1.00	1.04	.01	1.01	.99	1.03
Nation	-.15	.86	.43	1.70	-.07	.94	.50	1.77
Education	.00	1.00	.83	1.19	.01	1.01	.86	1.19
Non-Smokers	-.75*	.47	.27	.82	-.37	.69	.41	1.16
Bothered in smoky envt	-.01	.99	.76	1.28	-.01	.99	.79	1.24
Moderate Right	-.79	.46	.18	1.13	-.19	.83	.34	2.00
Left	-.51	.60	.23	1.54	-.61	.54	.21	1.42
Don't know	-.83*	.44	.20	.98	-.59	.56	.24	1.27
Respect								
Intercept	-.33				-.19			
Gender	.07	1.08	.62	1.87	-.35	.70	.43	1.14
Age	-.03**	.97	.95	.99	-.02*	.98	.97	1.00
Nation	.30	1.36	.67	2.75	.18	1.20	.62	2.30
Education	.00	1.00	.84	1.19	.10	1.10	.94	1.28
Non-Smokers	.11	1.12	.63	1.99	-.28	.76	.45	1.27
Bothered in smoky envt	-.16	.85	.67	1.09	-.01	.99	.78	1.25
Moderate Right	.18	1.20	.35	4.14	-.21	.81	.31	2.15
Left	.63	1.88	.56	6.28	-.65	.52	.18	1.49
Don't know	.27	1.31	.43	4.01	-.20	.82	.34	1.98

Table 59: Multinomial logistic regression:Salience of pro arguments regressed onto predisposition

	Wave 2				Wave 3			
Ref. = Health	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Passive Smoking								
Intercept	-2.56				-1.28			
Gender	-.30	.74	.40	1.38	-.56	.57	.31	1.04
Age	.01	1.01	.99	1.03	.00	1.00	.98	1.02
Nation	.48	1.61	.61	4.28	.06	1.06	.46	2.41
Education	.04	1.04	.85	1.28	-.03	.97	.79	1.20
Non-Smokers	-.01	.99	.50	1.99	-.57	.57	.30	1.08
Bothered in smoky envt	-.18	.84	.63	1.11	.04	1.05	.78	1.41
Moderate Right	.67	1.95	.53	7.20	.25	1.29	.32	5.13
Left	.51	1.66	.42	6.55	.50	1.66	.42	6.57
Don't know	-.24	.79	.22	2.88	.15	1.16	.32	4.21
Other Arguments								
Intercept	-2.58				-.81			
Gender	-.96*	.38	.21	.72	-.20	.82	.44	1.53
Age	.03*	1.03	1.00	1.05	-.01	.99	.97	1.01
Nation	.24	1.27	.52	3.08	-.32	.73	.35	1.52
Education	.00	1.00	.80	1.24	.00	1.00	.82	1.22
Non-Smokers	-.77*	.46	.24	.90	-.46	.63	.33	1.20
Bothered in smoky envt	-.16	.86	.65	1.13	.12	1.13	.82	1.55
Moderate Right	.45	1.57	.31	7.80	-.34	.71	.22	2.36
Left	.41	1.51	.28	8.21	-.22	.80	.24	2.67
Don't know	.77	2.16	.48	9.73	-.36	.70	.24	2.04

Table 60: Multinomial logistic regression:Salience of pro arguments regressed onto perceived support

	Wave 2				Wave 3			
Ref. = Health	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Bother								
Intercept	-1.80				-1.17			
Gender	-.40	.67	.39	1.14	-.30	.74	.45	1.23
Age	.02*	1.02	1.00	1.04	.01	1.01	1.00	1.03
Nation	-.13	.88	.45	1.73	-.05	.95	.49	1.86
Education	-.03	.97	.81	1.17	.01	1.01	.86	1.20
Perceived Support	-.36	.70	.38	1.28	-.63*	.54	.30	.95
Respect								
Intercept	-.77				-.17			
Gender	.19	1.21	.68	2.14	-.39	.68	.42	1.11
Age	-.03*	.97	.95	.99	-.02*	.98	.96	.99
Nation	.10	1.11	.56	2.20	.09	1.09	.57	2.10
Education	.04	1.04	.87	1.23	.04	1.04	.89	1.22
Perceived Support	.08	1.08	.55	2.12	-.06	.94	.50	1.79
Passive Smoking								
Intercept	-3.36				-1.47			
Gender	-.27	.77	.42	1.41	-.20	.82	.44	1.53
Age	.01	1.01	.99	1.03	-.01	.99	.97	1.01
Nation	.60	1.82	.69	4.80	.19	1.20	.51	2.83
Education	.10	1.10	.91	1.34	-.01	.99	.81	1.21
Perceived Support	.03	1.03	.47	2.24	.04	1.04	.46	2.36

Table 60: Multinomial logistic regression:Salience of pro arguments regressed onto perceived support

	Wave 2				Wave 3			
Ref. = Health	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Bother								
Other Arguments								
Intercept	-2.42				-.56			
Gender	-.64*	.53	.29	.95	-.32	.73	.38	1.39
Age	.02	1.02	1.00	1.04	-.01	.99	.97	1.01
Nation	.27	1.32	.56	3.10	-.39	.68	.32	1.46
Education	.03	1.04	.85	1.27	-.03	.97	.78	1.20
Perceived Support	-.56	.57	.29	1.11	-.48	.62	.29	1.31

Table 61: Multinomial logistic regression: Salience of pro arguments regressed onto interpersonal communication

	Wave 2				Wave 3			
Ref. = Health	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Bother								
Intercept	-1.64				-1.24			
Gender	-.39	.68	.40	1.16	-.22	.80	.48	1.34
Age	.02	1.02	1.00	1.04	.01	1.01	.99	1.03
Nation	-.14	.87	.44	1.71	-.07	.94	.47	1.85
Education	-.03	.97	.81	1.17	.03	1.03	.87	1.22
Perceived Support	-.39	.68	.36	1.26	-.57	.56	.31	1.02
Disc. Frequ. with opponents								
Never	Ref.				Ref.			
One time	-.79	.45	.13	1.60	-1.10	.33	.10	1.14
Several times	-.01	.99	.54	1.82	.50	1.64	.96	2.82
Disc. Frequ. with supporters								
Never	Ref.				Ref.			
One time	-.04	.96	.36	2.59	-.64	.53	.15	1.91
Several times	-.03	.97	.54	1.75	-.16	.85	.49	1.46
Respect								
Intercept	-.90				-.60			
Gender	.27	1.30	.73	2.33	-.39	.68	.41	1.12
Age	-.03*	.97	.95	.99	-.03*	.98	.96	.99
Nation	.09	1.09	.55	2.17	.14	1.15	.59	2.23
Education	.04	1.04	.87	1.23	.02	1.02	.87	1.20

Table 61: Multinomial logistic regression: Salience of pro arguments regressed onto interpersonal communication

	Wave 2				Wave 3			
Ref. = Health	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
Perceived Support	.18	1.20	.59	2.42	-.09	.92	.48	1.77
Disc. Frequ. with opponents								
Never	Ref.				Ref.			
One time	.22	1.24	.49	3.14	.18	1.20	.57	2.54
Several times	.22	1.24	.67	2.32	.24	1.27	.74	2.19
Disc. Frequ. with supporters								
Never	Ref.				Ref.			
One time	-.23	.79	.30	2.07	.85	2.34	.93	5.84
Several times	-.04	.96	.52	1.75	.65*	1.91	1.05	3.48
Passive Smoking								
Intercept	-3.27				-1.87			
Gender	-.30	.74	.40	1.37	-.14	.87	.46	1.65
Age	.01	1.01	.99	1.03	-.01	.99	.97	1.01
Nation	.59	1.80	.68	4.77	.19	1.21	.51	2.88
Education	.06	1.06	.87	1.30	-.02	.99	.80	1.21
Perceived Support	.04	1.04	.47	2.31	.06	1.07	.46	2.45
Disc. Frequ. with opponents								
Never	Ref.				Ref.			
One time	.77	2.15	.89	5.21	.03	1.03	.36	2.91
Several times	-.15	.87	.41	1.83	.59	1.80	.92	3.52
Disc. Frequ. with supporters								
Never	Ref.				Ref.			

Table 61: Multinomial logistic regression: Salience of pro arguments regressed onto interpersonal communication

	Wave 2				Wave 3			
Ref. = Health	Est.	Exp (B)	95% CI		Est.	Exp (B)	95% CI	
One time	-.02	.98	.34	2.82	.08	1.08	.28	4.19
Several times	.10	1.11	.56	2.20	.27	1.31	.64	2.67
Other Arguments								
Intercept	-2.32				-.30			
Gender	-.63*	.53	.29	.98	-.36	.70	.36	1.33
Age	.02	1.02	1.00	1.04	-.01	.99	.97	1.01
Nation	.21	1.24	.52	2.93	-.45	.64	.29	1.39
Education	.04	1.04	.85	1.27	-.05	.96	.77	1.19
Perceived Support	-.69	.50	.25	1.00	-.52	.59	.28	1.27
Disc. Frequ. with opponents								
Never	Ref.				Ref.			
One time	-.33	.72	.23	2.29	.14	1.15	.46	2.88
Several times	-.49	.61	.29	1.28	-.43	.65	.30	1.41
Disc. Frequ. with supporters								
Never	Ref.				Ref.			
One time	.15	1.16	.38	3.54	-.30	.75	.20	2.82
Several times	.38	1.46	.74	2.89	.07	1.07	.54	2.13

ANNEX B QUESTIONS

Demographics

What's your gender?

0. Male
1. Female

How old are you?

What's your nationality?

What's the highest school or education you officially finished?
(labels were left in Italian because they are difficult to translate in English)

1. Nessuna scuola terminata
2. Scuola elementare
3. Tirocino / apprendistato o scuola professionale a tempo pieno
4. Scuola superiore non universitarià (Technikum, etc.)
5. Scuola universitaria professionale (SUPSI, etc.)
6. Università o politecnico
7. Altra scuola
9. Nessuna risposta / non lo so

General opinion

Generally speaking are you for or against the smoking ban in restaurants and bars?

0. Against a smoking ban
1. For a smoking ban
9. No answer / don't know

Beliefs

If a smoking ban is imposed in restaurants and bars in Ticino, which effects do you expect? I will read some statements. For each one, please tell me if you expect that this will happen or not.

The health status of non-smokers will improve because they are no longer forced to smoke passively

0. I do not expect that
1. I expect that
9. No answer / don't know

Smoking will decrease generally
0. I do not expect that
1. I expect that
9. No answer / don't know

Some smokers will stop smoking
0. I do not expect that
1. I expect that
9. No answer / don't know

Proprietors and restaurant owners will earn lower revenues (reversed)
0. I expect that
1. I do not expect that
9. No answer / don't know

Prices in gastronomy will increase because many restaurants will have to be altered (reversed)
0. I expect that
1. I do not expect that
9. No answer / don't know

There are two opinions on the question, if a smoking ban is a breach of personal freedom: some say yes, it is a breach of personal freedom. I may only happen, if another even more valuable good is endangered by smoking. Others say that smoking ban has nothing to do with freedom. It is only about the question, if smokers have the right to molest or harm other with their smoke. Which of these positions is closer to yours?
0. The first (= it is a breach of personal freedom)
1. The second (= it has nothing to do with freedom)
9. No answer / don't know

Salience of pro and con arguments
What do you think is the most important reason for a smoking ban in public spaces?

And what is the best reason against the ban?

Perceived support
And how about your friends and colleagues: are most in favor or against a smoking ban?

0. Most are against
1. Most are in favor
9. No answer / don't know

Self-interest
Do you smoke, even rarely?

0. Yes
1. No
9. No answer / don't know

I will now read some opinions. Please tell me for each, if you fully agree, rather agree, rather disagree or fully disagree. (only one statement was used)

I can never stay long in smoke-filled rooms.

1. Fully disagree
2. Rather disagree
3. Rather agree
4. Fully agree
9. No answer / don't know

Political predisposition
To which political party do you feel closest?

- Swiss people's party
- La Lega
- Christian Democrats
- Radical
- Social Democrats
- No answer / don's know

Newspaper exposure
How much time do you spend reading the newspaper on a normal week-day?
And how much time of this do you spend with articles on cantonal politics?

Interpersonal communication

Did you ever experience that somebody vehemently opposed the smoking ban in public?

0. Never
1. Yes, one time
2. Yes, several times
9. No answer / don't know

And the opposite: that somebody argued vehemently in favor of it?

0. Never
1. Yes, one time
2. Yes, several times
9. No answer / don't know

ANNEX C CODEBOOK FOR THE CONTENT ANALYSIS

Codebook for the Swiss newspaper coverage of Smoking Ban

DIFU Project - *Monitoring of the introduction of Smoking ban in Tessin*

Authors: Prof. Peter J. Schulz, Uwe Hartung,
Maddalena Fiordelli, Carmen Faustinelli

21 April 2006

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Index

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Introduction to the Codebook

The codebook has the purpose to measure the occurence and frequency of certain elements in the Swiss newspaper coverage of smoking ban (since 1st october 2004 to 31st march 2006). For every article, coders determine a number of qualities as prescribed in this codebook. Every coder receives printouts of articles to code. They can be coded in any order. The coder first reads through completely the article to code. He/she then codes the formal, article-level categories. Then the article is read a second time. At every occurence of a statement (argument either for or against the smoking ban), the statement is coded, filling in in the appropriate line the source, the type of argument, and the tendency to which it used (pro-ban or contra-ban).
A statement ends when one of the coded statement variables changes.

> Example: *„In ristoranti e bar il fumo deve essere vietato, come chiede la maggioranza della popolazione: lo afferma l'Istituto Svizzero di prevezione dell'alcolismo e altre tossicomanie (ISPA). L'obiezione del settore della ristorazione, secondo cui il divieto ridurebbe il fatturato, é confutata dai risultati delle ricerche più recenti, rileva l'Ispa."*

In this example we can see that the first sentence is a statement with the argument 15 Ban is justified because majority wants it. Next sentence of the same example is another statement with the argument 51 Financial losses for bars, restaurants, etc., here used with the tendency 1: Pro ban (see below the paragraph 2.5.)
Some printouts consist of several articles, not all of which deal with smoking ban or related subjects. Examples of this are the sections "In Kürze" in Aargauer Zeitung, "Nachrichten" in Basler Zeitung. An article can be defined by its own headline, its own author or source, its own subject, its own place of origin indicated (Ortsangabe). Articles that make no mention of the subject under study are crossed through on the printout; no codesheet is filled in. For every article on the subject under study, a codesheet is filled in.
When coding was completed, reread the article a third time to check for statements so far undetected. If necessary, correct codesheet.

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

1. Article level categories

1.1. Identification number

Every article receives a four-digit identification number. The coder determines the number, by using consecutive three digit numbers, using the Coder key as first digit. In case numbers run out, the coder contacts project management to be allotted a new slot of numbers. The coder writes down the identification number on the codesheet and next to the article on the printout.

1.2. Coder

1 Comi Alice
2 Faustinelli Carmen
3 Fiordelli Maddalena
4 Grasso Gianfranco
5 Mumprecht Esther

1.3. Medium according to Codeplan

See the end of this document.

1.4. Author

1 Journalist
2 Authority of the field (doctors, scientists)
3 Health institution or other institutions and associations
4 Delegates from associations of owners' of bars and restaurants
5 Politicians
6 Regular People (letters and interviews)

9 Unknown, unclear

1.5. Date of article, year, month and day

The German (and possibly other) language printouts list the date in the form Year-Month-Day. Take care to code accordingly.

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland
Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

1.6. Section in newspaper

1 Politics, general news section
2 Business, finance, economy
3 Culture, literature, theater, the arts, etc.
4 Human interest news
5 Sports
6 Special pages such as Life Style, Eating Out, Advice, Science, Health etc.
7 Local (often with city or region mentioned in title)
8 Other, e.g. supplements such as NZZ Folio
9 No indication, unclear

1.7. Type of article

1 Factual: News stories, reports
2 Opinion: Commentary, editorial, satire (all texts that report less about what happened, but rather formulate the author's assessment of it, his/her opinion and attitudes on it, his evaluation).
3 Subjective experience: Features, etc. (all texts that report what happened, but from an author's subjective point of view, how the author witnessed the occurence)
4 Interview
5 Clippings from other media
6 Letter to the editor
7 Service (Schedule, tips of all kind, alert to events)
9 Other, unclear

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland
Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

2. Statement level categories

2.1. Source

The source is the person or institution who makes the argument, to whom the argument is attributed. That can happen in a direct quote or indirectly by summarizing a person's or institution's point of view. Unattributeable statements are coded as if the article author is the source.
Source is coded according to Codeplan Source (see the end of this document).
The source is constituted by 4 spaces. The real space of the source code is made by the first three, while the this is a political level distinction that have to be made only in the cases of Sources categories 580 and 590. This political level distinction follows this rule: 1: Federal Level - 2: Cantonal Level - 3: Local level (cities)

2.2. Geographical indication

The geographical indication specifies to what region the statement about the smoking ban is referred to, that is the regional or political entity that is to adopt or not adopt a smoking ban.
Geographical indication is coded according to Codeplan geographical regions (see the end of this document)

2.3. Ban Location

The ban location is the place in which the statement asserts that is taking/will take place a smoking ban. This statement-level variable is coded according to these categories:

01 Public houses (general term for bar, restaurants: when you have to distinguish please use 11 - 12)
02 Hotels
03 Vehicles of public transportation (trains, buses, etc.)
04 Other facilities of public transportation (stations, waiting rooms)
05 Buildings and offices of public administration
06 Public recreational areas (sports facilities, public parks, theathers, cinema etc)
07 Private transportation means (cars)
08 Shops
09 Workplaces in general, other than mentioned above
10 Unspecified (hospital, schools, Party rooms etc)
11 Bar (tea-rooms too)
12 Restaurant (Osteria – Bistrò also)
13 Disco club – Night club
14 Other (specify the different places at the bottom of the page)

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland
Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

2.4. Arguments

The arguments are structured into two groups, for the ban and against the ban. The coder is to chose the most appropriate, but will have the chance to code the tendency separately. For instance, the argument that social relations between smokers and non-smokers will improve is to be coded as Argument 13: Better social relations between smokers and non-smokers and Tendency 1: Pro ban, because the argument is approved, held in the way the category is formulated (this is the normal case we can see in our examples and below in example1).

> Example1:*"Già in Quattro paesi europei (Italia, Malta, Irlanda e Finlandia) e in diversi stati federali Usa sono in vigore leggi a tutela dei posti di lavoro senza fumo. E dal primo giugno, osserva Polli, 'anche in Svezia la salute della popolazione avrà la priorità sugli interessi economici dell'industria del tabacco'".* This first example is the most normal one, we have a statement that has argument 34 Good experiences in other countries with smoking bans, unspecified and its normal tendency 1: Pro ban.

An argument holding that social relations will not improve (which is different from the argument that relations will deteriorate) will be coded also as Argument 13, but Tendency 2: Against the ban (you can see this kind of event in example2 below).

> Example2: *„E' impossibile quantificare il costo globale per crare una sala fumatori ma vorrei sottolineare che lo spirito della legge é esattamente l'opposto, cioé quello di vietare completamente il fumo nei bar e ristoranti ticinesi. Poi, se un pubblico esercizio ha lo spazio e l'esigenza di creare un locale fumatori, deve fare un certo investimento."* As we can see in this example the argument is the 52: High investment costs for bars etc. but the tendency is the 1: Pro ban. Claudio Belloli, the author of this statement, is in fact one of the most important people fighting for the ban.

The argument that relationships will be damaged, however, is to be coded as Argument 43 Worse social relations between smokers and non-smokers and Tendency 2: Against the ban (see below example3).

> Example3: *„Costerà caro il permesso di fumare nei bar ticinesi. Una fattura salata, di 25 milioni di franchi per realizzare una sala fumatori indipendente e ben aerata nei bar, ristoranti, snack bar, discoteche e birrerie sparsi in tutto il cantone".* The argument of this example is the same of example2, but in this case it is used with its normal tendency, that we repeat in the corresponding field as 2: against the ban.

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland
Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Arguments for the ban

09 other specific argument for the ban

This category is coded when a sourse is quoted as coming out for the ban, or said to be in favor with any specific argument or reason not included in our arguments

Example: *"donner un bon exemple aux enfants"*

10 General statement favoring the ban

This category is coded when a source is quoted as coming out for the ban, or is said to be in favor, without any specific argument or reason being mentioned

Moral/political arguments

11 Legal protection of non-smokers' rights is called for

All arguments that indicate non-smokers rights to breathe clean air, not to be annoyed or harassed by smoke, need to be protected by law, also that their wish for smoke-free air needs to be protected. Code only when it is explicit that rights or legitimate needs and the necessity to protect them by law are mentioned.

Example: „*l'associazione infatti <<rispetta la libertà di scelta di ognuno allorquando però non pregiudichi la libertà di coloro che non desiderano fumare passivamente>>"*

12 Smoking ban will reduce molestation, harassment of non-smokers by smoke

All arguments that mention that a smoking ban will de facto reduce harassment for non-smokers, respect their wishes.

Example: „*Ebbene, io ritengo che faccia parte della categoria degli astensionisti anche chi, becnchè infastidito dal fumo di sigaretta negli esercizi pubblici (specie dove si mangia), tace e non reclama il suo diritto sacrosanto di essere li senza essere costretto a resprirare aria piena di fumo, per lamentarsi poi in privato quando a casa propria si rende conto che ha gli occhi irritati e puzza dalla testa ai piedi (puzzano i capelli, i vestiti e persino la biancheria intima)"*

13 Better social relations between smokers and non-smokers

Less conflict, less tension, less strife between the two groups because of ban on smoking

14 Ban is just because non-smokers are in the majority

All arguments that support the ban because there are more non-smokers than smokers

Example: „*Nel settore alberghiero e della ristorazione tre dipendenti su quattro vedono di buon occhio ambienti in cui sia proibito fumare"*

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

15 Ban is justified because majority wants it

All statements that hold that public opinion, the Ticinese population, the Swiss population at large favors the ban

Health arguments

16 General reduction of passive smoking

All arguments that mention that passive smoking will be reduced by the ban, that this is beneficial for non-smokers' or public health. References to public health without explicit mention that non-smokers are meant are coded under 20.

> Example: *"Sulla relazione significativa tra fumo passive e tumore del polmone oggi però non ci sono dubbi." "Questa relazione è anche ben accertata per le malattie cardiovascolari, il ritardo di crescita intrauterina, il sottopeso al momento della nascita, la morte improvvisa del neonato, le infezioni delle vie respiratorie per il bambino giovane, l'aumento della frequenza e delle crisi per il bambino asmatico"*

17 Reduction of passive smoking of people who work in bars, restaurants, etc.

All arguments that mention that passive smoking of people who work in places where people smokes will be reduced by the ban, that this is beneficial to these people's health.

> Example: *"Da un sondaggio condotto dall'organizzazione di categoria Hotel&Gastro Union risulta che molte persone che operano nella ristorazione chiedono il divieto di fumo rifacendosi alla legge che obbliga I datori di lavoro a proteggere il personale dal fumo passivo"*

18 Reduction of passive smoking of children

All arguments that mention that passive smoking of children will be reduced by the ban, that this is beneficial to children

19 Reduction of smoking beneficial to smokers' health

All arguments that hold that the ban will reduce smoking, or the number of people who smoke, and thus be beneficial to their health, or to public health. References to public health without explicit mention that smokers are meant are coded under 19.

20 Unspecified references to improvement of public health

All statements that mention health benefits and cannot be placed in any of the above categories

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Economic arguments

31 Financial gains

All arguments that hold that bars, restaurants and all other kind of businesses will win customers, raise their revenue, increase their profits as a consequence of the ban

32 Financial benefits for health system

All arguments that hold that the health system will save money as a consequence of an improvement in public health caused by the ban

33 Expectation of high compliance

All arguments founded on statements that mention the expectation of high compliance with the law

34 Good experiences in other countries with smoking bans, unspecified

All arguments that mention good experiences in other countries with a ban on smoking in public places. Specified statements (e.g. on positive health consequences of the introduction of the ban in other contries) are coded as if this were an expectation of what will happen in Ticino, or any other region (canton, country) the argument refers to. A statement of high compliance with the ban in Italy is coded as 33, a general mention of good experience with the ban in Italy is coded as 34

> Example:*"Già in Quattro paesi europei (Italia, Malta, Irlanda e Finlandia) e in diversi stati federali Usa sono in vigour leggi a tutela dei posti di lavoro senza fumo. E dal primo giugno, osserva Polli, 'anche in Svezia la salute della popolazione avrà la priorità sugli interessi economici dell'industria del tabacco'"*

35 Good experience with earlier regulation in Switzerland

All statements that mention good experiences with respective regulations in Switzerland, especially those that present the ban on smoking as a consequential continuation of tobacco prevention policies in the country

36 Avant-garde role

All arguments that hold that the canton/country (the entity discussing the ban) could play the role of avant-garde, the first to promote regulations that others will adopt

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Arguments against the ban

60 Other specific argument against the ban

This category is coded when a source is quoted as coming out against the ban, or is said to be in opposition, with any specific argument or reason not included in our arguments

40 General statement opposing the ban

This category is coded when a source is quoted as coming out against the ban, or is said to be in opposition, without any specific argument or reason being mentioned.

Moral/political arguments

41 Freedom of smokers is illegitimately infringed

All arguments that indicate that the ban illegitimately restricts the freedom of smokers, that the state has no right to do this, that the state's attempts at regulation have to be opposed, that health problems cannot be solved by such regulation

> Example: „*C'è chi plaude alle nuove misure contro il fumo passivo e chi le ritiene, invece, una limitazione alla libertà individuale"*

42 Smoking ban will increase molestation, harassment

All arguments that mention that a smoking ban will increase harassment, result in nuisance, for instance in more noise by people smoking outside of the place where smoking is banned

43 Worse social relations between smokers and non-smokers

More conflict, more tension, more strife between the two groups because of ban on smoking

44 Ban will discriminate smokers, stigmatize smokers

All arguments that oppose the ban because it discriminates against smokers, stigmatizes them. Also coded if ban is opposed on grounds of minority protection.

Health arguments

45 Other solutions for reducing passive smoking

All arguments that hold that there can be other, less radical solutions than the ban to reduce passive smoking, all groups taken together.

> Example: *„Un divieto assoluto di fumo negli esercizi pubblici ticinesi non è accettabile. <…> Sono già stati presi probbedimenti per diminuire l'esposizione al fumo passivo, dov'era possibile e auspicato dalla clientela, istallando sistemi di ventilazione più efficaci e introducendo spazi riservati ai non fumatori"*

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Economic arguments

51 Financial losses

All arguments that hold that bars, restaurants and all other kind of public houses, all other businesses will lose customers, their revenue will sink, their profits decrease as a consequence of the ban.

> Example:*"Nella sua relazione il presidente dalla GastroLago Maggiore Giuseppe Lupi ha disegnato un quadro a tinte fosche per I soci, con le nuove leggi (meno alcool e fumo), le difficoltà economiche e la chiusura di alberghi."*

52 High investment costs for places who want to adapt the architecture

All arguments that hold that owners of bars, restaurants etc, all other institutions affected by the ban will have high costs for rebuilding their places to accommodate smokers in special rooms

> Example: *„Costerà caro il permesso di fumare nei bar ticinesi. Una fattura salata, di 25 milioni di franchi per realizzare una sala fumatori indipendente e ben aerata nei bar, ristoranti, snack bar, discoteche e birrerie sparsi in tutto il cantone"*

53 Expectation of low compliance

All arguments founded on statements that mention the expectation of low compliance with the law

54 Bad experiences in other countries with smoking bans, unspecified

All arguments that mention bad experiences, failed hopes in other countries with a ban on smoking in public places. Specified statements (e.g. on negative economic consequences of the introduction of the ban in other contries) are coded as if this were an expectation of what will happen in the geographic area the argument refers to.

> Example:*"Ha ricordato inoltre che solo in poche nazioni europee (Italia e Irlanda) si è giunti a tanto e in nessun cantone Svizzero. Anzi. "*

55 Bad experience with earlier regulation in Switzerland

All statements that mention bad experiences with respective regulations in Switzerland, especially with the 1994 regulation and the assumptions that it did not change much

> Example: *„La legge sugli esercizi pubblici del 1994, però, è chiara: un terzo die tavoli deve essere riservato ai non fumatori. Ma non sempre e dappertutto la legge è legge, come ha evidenziato il nostro tour in una trentina di locali pubblici, snack bar e ristoranti ticinesi."*

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

56 Cantonal vs. federal competence, nation-state vs. international

All arguments that hold it would be appropriate or preferable not to regulate smoking in public places in the canton, but rather wait for a nation-wide regulation from the federal government. The category is also chosen for arguments that a nation-wide regulation should wait for a EU-level regulation, or any other international one.

2.5. Tendency

Here it is to be coded to which use (pro ban or against ban) an argument is used. An argument pro ban that is merely stated, affirmed, put forth is always coded as pro ban. If it is, however, refuted, contradicted, if doubt is cast over it, it's validity questioned, it is coded as against the ban. Arguments against the ban are treated accordingly. The combination of coding of argument and tendency has to mirror the source's intention.

Types of coding tendency

	Argument for the ban	Argument against the ban
Argument is affirmed	PRO	AGAINST
Argument is refuted, contradicted, rejected	AGAINST	PRO

Coding

01 PRO ban

02 AGAINST ban

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Codeplan Medium

Daily newspapers	11	Basler Zeitung
	12	Berner Zeitung
	13	Blick
	14	Giornale del Popolo
	15	Corriere del Ticino
	16	La Regione
	17	Mittelland Zeitungen, MLZ
	18	Vingtquatre Heures
	19	Neue Zürcher Zeitung (NZZ)
	20	Tribune de Genève
	21	Tagesanzeiger
	22	Le Nouvelliste
	23	Le Temps
	24	Matin Semaine
Sunday newspapers	31	Il Caffè
	32	Sonntagsblick
	33	Matin dimanche

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Codeplan Sources

110 Journalists

210 Medical doctors, medical experts

310 Institutions of health information, desease prevention, health care (ISPA, ASNF, Lega polmonare ticinese, Lega „Vita e Salute“ etc.)
330 Institutions of public transportation
350 Associations or commissions that defend the rights of smokers
390 Other Institutions and Association/ Unspecified Institutions and Associations (school, universities, theaters, companies like Novartis and other economical companies, ecological not political associations etc)

410 Swiss Gastronomic Associations
- 421 Ticino Gastronomic Associations
- 422 Aargau Gastronomic Associations
- 423 Appenzellerland Gastronomic Associations
- 424 Appenzellerland Gastronomic Associations
- 425 Bern Gastronomic Associations
- 426 Baselland Gastronomic Associations
- 427 Basel-Stadt Gastronomic Associations
- 428 Fribourg Gastronomic Associations
- 429 Genève Gastronomic Associations
- 430 Glarnerland Gastronomic Associations
- 431 Graubünden Gastronomic Associations
- 432 Jura Gastronomic Associations
- 433 Luzern Gastronomic Associations
- 434 Neuchâtel Gastronomic Associations
- 435 Nidwalden Gastronomic Associations
- 436 Obwalden Gastronomic Associations
- 437 St. Gallen Gastronomic Associations
- 438 Schaffhausen Gastronomic Associations
- 439 Solothurn Gastronomic Associations
- 440 Schwyz Gastronomic Associations
- 441 Thurgau Gastronomic Associations
- 442 Uri Gastronomic Associations
- 443 Vaud Gastronomic Associations

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

444 Valais Gastronomic Associations
445 Zug Gastronomic Associations
446 Zürich Gastronomic Associations

450 Associazione ticinese dei bar (Patrick Chappuis: President)
460 Other gastronomic associations, clubs

510 PPD – Partito Popolare Democratico;
PDC (PCD) _ Parti démocrate chrétien;
CVP _ Christlichdemokratische Volkspartei
520 PS – Partito Socialista;
PS _ Parti socialiste;
SP _ Sozialdemokratische Partei = LEFT
530 PLR – Partito Liberale Radicale;
PRD _ Parti radical-démocratique
FDP _ Freisinnig-Demokratische Partei
540 Lega dei ticinesi = RIGHT
550 UDC _ Unione Democratica di Centro;
UDC _ Union Démocratique du Centre;
SVP _ Schweizerische Volkspartei = RIGHT
560 Green party
570 PEV_ Partito evangelico swizzero
PEV_ Parti évangélique
EVP_ Evangelische Volkspartei der Schweiz

580 Gran Consiglio (legislativo) – here all the different commissions like Legislativa
Assemblée Fédérale (Grand Conseil et Conseil des Etats) – le législatif
Parlament (Nationalrat und Ständerat) – das Legislative
590 Consiglio di Stato (esecutivo)
Conseil fédéral (pouvoir exécutif fédéral)
Bundesrat (Exekutive des Bundes)
591 Department for Health and Society
592 Department of Education, Culture and Sport
593 Department for the Territory
594 Department for Finance and Economy
595 Department of Institutions

600 UFSP Ufficio Federale della Sanità pubblica
OFSP Office fédérale de la santé publique
BAG Bundesamt für Gesundheit
610 Other Swiss politicians

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland
Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

These are general cathegories for all the countries, not only for Switzerland

710 Regular People

720 Tourists

730 Bar owners without mentioned affiliation to any of the associations

740 Restaurant owners (without affiliation)

750 Hotel owners (without affiliation)

760 Police and other Authorities

770 Workers of Restaurants, bars and hotels

810 Statistical studies and companies

820 Tobacco industry and trade

830 Technological companies of air conditioning

840 Tobacco farmers

This distinction refers to all the political organs of other countries

901 Politicians in other countries

902 Political Institutions in other countries

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Codeplan geographical indication

01 Ticino (TI)
02 Appenzello Esterno (AR)
03 Appenzello Interno (AI)
04 Argovia (AG)
05 Basilea Campagna (BL)
06 Basilea Città (BS)
07 Berna (BE)
08 Friburgo (FR)
09 Ginevra (GE)
10 Giura (JU)
11 Glarona (GL)
12 Grigioni (GR)
13 Lucerna (LU)
14 Neuchâtel (NE)
15 Nidvaldo (NW)
16 Obvaldo (OW)
17 San Gallo (SG)
18 Sciaffusa (SH)
19 Soletta (SO)
20 Svitto (SZ)
21 Turgovia (TG)
22 Uri (UR)
23 Vallese (VS)
24 Vaud (VD)
25 Zugo (ZG)
26 Zurigo (ZH)

28 Single cities, regions smaller than cantons
29 Confederation

31 Any other single European country, or part of a country
32 European Union
33 German Swiss linguistic part
34 French Swiss linguistic part

41 Any other single country outside Europe, or part of a country
91 Other, unspecified

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Codebook for the Swiss newspaper coverage of Smoking Ban

DIFU Project - *Monitoring of the introduction of Smoking ban in Tessin*

Authors: Prof. Peter J. Schulz, Uwe Hartung,
Maddalena Fiordelli, Carmen Faustinelli

21 April 2006

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Index

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Introduction to the Codebook

The codebook has the purpose to measure the occurence and frequency of certain elements in the Swiss newspaper coverage of smoking ban (since 1st october 2004 to 31st march 2006). For every article, coders determine a number of qualities as prescribed in this codebook. Every coder receives printouts of articles to code. They can be coded in any order. The coder first reads through completely the article to code. He/she then codes the formal, article-level categories. Then the article is read a second time. At every occurence of a statement (argument either for or against the smoking ban), the statement is coded, filling in in the appropriate line the source, the type of argument, and the tendency to which it used (pro-ban or contra-ban).
A statement ends when one of the coded statement variables changes.

> Example: *„In ristoranti e bar il fumo deve essere vietato, come chiede la maggioranza della popolazione: lo afferma l'Istituto Svizzero di prevezione dell'alcolismo e altre tossicomanie (ISPA). L'obiezione del settore della ristorazione, secondo cui il divieto ridurebbe il fatturato, é confutata dai risultati delle ricerche più recenti, rileva l'Ispa."*

In this example we can see that the first sentence is a statement with the argument 15 Ban is justified because majority wants it. Next sentence of the same example is another statement with the argument 51 Financial losses for bars, restaurants, etc., here used with the tendency 1: Pro ban (see below the paragraph 2.5.)
Some printouts consist of several articles, not all of which deal with smoking ban or related subjects. Examples of this are the sections "In Kürze" in Aargauer Zeitung, "Nachrichten" in Basler Zeitung. An article can be defined by its own headline, its own author or source, its own subject, its own place of origin indicated (Ortsangabe). Articles that make no mention of the subject under study are crossed through on the printout; no codesheet is filled in. For every article on the subject under study, a codesheet is filled in.
When coding was completed, reread the article a third time to check for statements so far undetected. If necessary, correct codesheet.

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

1. Article level categories

1.1. Identification number

Every article receives a four-digit identification number. The coder determines the number, by using consecutive three digit numbers, using the Coder key as first digit. In case numbers run out, the coder contacts project management to be allotted a new slot of numbers. The coder writes down the identification number on the codesheet and next to the article on the printout.

1.2. Coder

1 Comi Alice
2 Faustinelli Carmen
3 Fiordelli Maddalena
4 Grasso Gianfranco
5 Mumprecht Esther

1.3. Medium according to Codeplan

See the end of this document.

1.4. Author

1 Journalist
2 Authority of the field (doctors, scientists)
3 Health institution or other institutions and associations
4 Delegates from associations of owners' of bars and restaurants
5 Politicians
6 Regular People (letters and interviews)

9 Unknown, unclear

1.5. Date of article, year, month and day

The German (and possibly other) language printouts list the date in the form Year-Month-Day. Take care to code accordingly.

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland
Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

1.6. Section in newspaper

1 Politics, general news section
2 Business, finance, economy
3 Culture, literature, theater, the arts, etc.
4 Human interest news
5 Sports
6 Special pages such as Life Style, Eating Out, Advice, Science, Health etc.
7 Local (often with city or region mentioned in title)
8 Other, e.g. supplements such as NZZ Folio
9 No indication, unclear

1.7. Type of article

1 Factual: News stories, reports
2 Opinion: Commentary, editorial, satire (all texts that report less about what happened, but rather formulate the author's assessment of it, his/her opinion and attitudes on it, his evaluation).
3 Subjective experience: Features, etc. (all texts that report what happened, but from an author's subjective point of view, how the author witnessed the occurence)
4 Interview
5 Clippings from other media
6 Letter to the editor
7 Service (Schedule, tips of all kind, alert to events)
9 Other, unclear

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland
Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

2. Statement level categories

2.1. Source

The source is the person or institution who makes the argument, to whom the argument is attributed. That can happen in a direct quote or indirectly by summarizing a person's or institution's point of view. Unattributeable statements are coded as if the article author is the source.
Source is coded according to Codeplan Source (see the end of this document).
The source is constituted by 4 spaces. The real space of the source code is made by the first three, while the this is a political level distinction that have to be made only in the cases of Sources categories 580 and 590. This political level distinction follows this rule: 1: Federal Level - 2: Cantonal Level - 3: Local level (cities)

2.2. Geographical indication

The geographical indication specifies to what region the statement about the smoking ban is referred to, that is the regional or political entity that is to adopt or not adopt a smoking ban.
Geographical indication is coded according to Codeplan geographical regions (see the end of this document)

2.3. Ban Location

The ban location is the place in which the statement asserts that is taking/will take place a smoking ban. This statement-level variable is coded according to these categories:

01 Public houses (general term for bar, restaurants: when you have to distinguish please use 11 - 12)
02 Hotels
03 Vehicles of public transportation (trains, buses, etc.)
04 Other facilities of public transportation (stations, waiting rooms)
05 Buildings and offices of public administration
06 Public recreational areas (sports facilities, public parks, theathers, cinema etc)
07 Private transportation means (cars)
08 Shops
09 Workplaces in general, other than mentioned above
10 Unspecified (hospital, schools, Party rooms etc)
11 Bar (tea-rooms too)
12 Restaurant (Osteria – Bistrò also)
13 Disco club – Night club
14 Other (specify the different places at the bottom of the page)

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland
Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

2.4. Arguments

The arguments are structured into two groups, for the ban and against the ban. The coder is to chose the most appropriate, but will have the chance to code the tendency separately. For instance, the argument that social relations between smokers and non-smokers will improve is to be coded as Argument 13: Better social relations between smokers and non-smokers and Tendency 1: Pro ban, because the argument is approved, held in the way the category is formulated (this is the normal case we can see in our examples and below in example1).

> Example1:*"Già in Quattro paesi europei (Italia, Malta, Irlanda e Finlandia) e in diversi stati federali Usa sono in vigore leggi a tutela dei posti di lavoro senza fumo. E dal primo giugno, osserva Polli, 'anche in Svezia la salute della popolazione avrà la priorità sugli interessi economici dell'industria del tabacco'".* This first example is the most normal one, we have a statement that has argument 34 Good experiences in other countries with smoking bans, unspecified and its normal tendency 1: Pro ban.

An argument holding that social relations will not improve (which is different from the argument that relations will deteriorate) will be coded also as Argument 13, but Tendency 2: Against the ban (you can see this kind of event in example2 below).

> Example2: *„E' impossibile quantificare il costo globale per crare una sala fumatori ma vorrei sottolineare che lo spirito della legge é esattamente l'opposto, cioé quello di vietare completamente il fumo nei bar e ristoranti ticinesi. Poi, se un pubblico esercizio ha lo spazio e l'esigenza di creare un locale fumatori, deve fare un certo investimento."* As we can see in this example the argument is the 52: High investment costs for bars etc. but the tendency is the 1: Pro ban. Claudio Belloli, the author of this statement, is in fact one of the most important people fighting for the ban.

The argument that relationships will be damaged, however, is to be coded as Argument 43 Worse social relations between smokers and non-smokers and Tendency 2: Against the ban (see below example3).

> Example3: *„Costerà caro il permesso di fumare nei bar ticinesi. Una fattura salata, di 25 milioni di franchi per realizzare una sala fumatori indipendente e ben aerata nei bar, ristoranti, snack bar, discoteche e birrerie sparsi in tutto il cantone".* The argument of this example is the same of example2, but in this case it is used with its normal tendency, that we repeat in the corresponding field as 2: against the ban.

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland
Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Arguments for the ban

09 other specific argument for the ban

This category is coded when a sourse is quoted as coming out for the ban, or said to be in favor with any specific argument or reason not included in our arguments

Example: *"donner un bon exemple aux enfants"*

10 General statement favoring the ban

This category is coded when a source is quoted as coming out for the ban, or is said to be in favor, without any specific argument or reason being mentioned

Moral/political arguments

11 Legal protection of non-smokers' rights is called for

All arguments that indicate non-smokers rights to breathe clean air, not to be annoyed or harassed by smoke, need to be protected by law, also that their wish for smoke-free air needs to be protected. Code only when it is explicit that rights or legitimate needs and the necessity to protect them by law are mentioned.

Example: „*l'associazione infatti <<rispetta la libertà di scelta di ognuno allorquando però non pregiudichi la libertà di coloro che non desiderano fumare passivamente>>"*

12 Smoking ban will reduce molestation, harassment of non-smokers by smoke

All arguments that mention that a smoking ban will de facto reduce harassment for non-smokers, respect their wishes.

Example: „*Ebbene, io ritengo che faccia parte della categoria degli astensionisti anche chi, becnchè infastidito dal fumo di sigaretta negli esercizi pubblici (specie dove si mangia), tace e non reclama il suo diritto sacrosanto di essere li senza essere costretto a resprirare aria piena di fumo, per lamentarsi poi in privato quando a casa propria si rende conto che ha gli occhi irritati e puzza dalla testa ai piedi (puzzano i capelli, i vestiti e persino la biancheria intima)"*

13 Better social relations between smokers and non-smokers

Less conflict, less tension, less strife between the two groups because of ban on smoking

14 Ban is just because non-smokers are in the majority

All arguments that support the ban because there are more non-smokers than smokers

Example: „*Nel settore alberghiero e della ristorazione tre dipendenti su quattro vedono di buon occhio ambienti in cui sia proibito fumare"*

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

15 Ban is justified because majority wants it

All statements that hold that public opinion, the Ticinese population, the Swiss population at large favors the ban

Health arguments

16 General reduction of passive smoking

All arguments that mention that passive smoking will be reduced by the ban, that this is beneficial for non-smokers' or public health. References to public health without explicit mention that non-smokers are meant are coded under 20.

> Example: *"Sulla relazione significativa tra fumo passive e tumore del polmone oggi però non ci sono dubbi." "Questa relazione è anche ben accertata per le malattie cardiovascolari, il ritardo di crescita intrauterina, il sottopeso al momento della nascita, la morte improvvisa del neonato, le infezioni delle vie respiratorie per il bambino giovane, l'aumento della frequenza e delle crisi per il bambino asmatico"*

17 Reduction of passive smoking of people who work in bars, restaurants, etc.

All arguments that mention that passive smoking of people who work in places where people smokes will be reduced by the ban, that this is beneficial to these people's health.

> Example: *"Da un sondaggio condotto dall'organizzazione di categoria Hotel&Gastro Union risulta che molte persone che operano nella ristorazione chiedono il divieto di fumo rifacendosi alla legge che obbliga I datori di lavoro a proteggere il personale dal fumo passivo"*

18 Reduction of passive smoking of children

All arguments that mention that passive smoking of children will be reduced by the ban, that this is beneficial to children

19 Reduction of smoking beneficial to smokers' health

All arguments that hold that the ban will reduce smoking, or the number of people who smoke, and thus be beneficial to their health, or to public health. References to public health without explicit mention that smokers are meant are coded under 19.

20 Unspecified references to improvement of public health

All statements that mention health benefits and cannot be placed in any of the above categories

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Economic arguments

31 Financial gains

All arguments that hold that bars, restaurants and all other kind of businesses will win customers, raise their revenue, increase their profits as a consequence of the ban

32 Financial benefits for health system

All arguments that hold that the health system will save money as a consequence of an improvement in public health caused by the ban

33 Expectation of high compliance

All arguments founded on statements that mention the expectation of high compliance with the law

34 Good experiences in other countries with smoking bans, unspecified

All arguments that mention good experiences in other countries with a ban on smoking in public places. Specified statements (e.g. on positive health consequences of the introduction of the ban in other contries) are coded as if this were an expectation of what will happen in Ticino, or any other region (canton, country) the argument refers to. A statement of high compliance with the ban in Italy is coded as 33, a general mention of good experience with the ban in Italy is coded as 34

> Example:*"Già in Quattro paesi europei (Italia, Malta, Irlanda e Finlandia) e in diversi stati federali Usa sono in vigour leggi a tutela dei posti di lavoro senza fumo. E dal primo giugno, osserva Polli, 'anche in Svezia la salute della popolazione avrà la priorità sugli interessi economici dell'industria del tabacco'"*

35 Good experience with earlier regulation in Switzerland

All statements that mention good experiences with respective regulations in Switzerland, especially those that present the ban on smoking as a consequential continuation of tobacco prevention policies in the country

36 Avant-garde role

All arguments that hold that the canton/country (the entity discussing the ban) could play the role of avant-garde, the first to promote regulations that others will adopt

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Arguments against the ban

60 Other specific argument against the ban

This category is coded when a source is quoted as coming out against the ban, or is said to be in opposition, with any specific argument or reason not included in our arguments

40 General statement opposing the ban

This category is coded when a source is quoted as coming out against the ban, or is said to be in opposition, without any specific argument or reason being mentioned.

Moral/political arguments

41 Freedom of smokers is illegitimately infringed

All arguments that indicate that the ban illegitimately restricts the freedom of smokers, that the state has no right to do this, that the state's attempts at regulation have to be opposed, that health problems cannot be solved by such regulation

> Example: „*C'è chi plaude alle nuove misure contro il fumo passivo e chi le ritiene, invece, una limitazione alla libertà individuale"*

42 Smoking ban will increase molestation, harassment

All arguments that mention that a smoking ban will increase harassment, result in nuisance, for instance in more noise by people smoking outside of the place where smoking is banned

43 Worse social relations between smokers and non-smokers

More conflict, more tension, more strife between the two groups because of ban on smoking

44 Ban will discriminate smokers, stigmatize smokers

All arguments that oppose the ban because it discriminates against smokers, stigmatizes them. Also coded if ban is opposed on grounds of minority protection.

Health arguments

45 Other solutions for reducing passive smoking

All arguments that hold that there can be other, less radical solutions than the ban to reduce passive smoking, all groups taken together.

> Example: *„Un divieto assoluto di fumo negli esercizi pubblici ticinesi non è accettabile. <…> Sono già stati presi probbedimenti per diminuire l'esposizione al fumo passivo, dov'era possibile e auspicato dalla clientela, istallando sistemi di ventilazione più efficaci e introducendo spazi riservati ai non fumatori"*

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Economic arguments

51 Financial losses

All arguments that hold that bars, restaurants and all other kind of public houses, all other businesses will lose customers, their revenue will sink, their profits decrease as a consequence of the ban.

> Example:*"Nella sua relazione il presidente dalla GastroLago Maggiore Giuseppe Lupi ha disegnato un quadro a tinte fosche per I soci, con le nuove leggi (meno alcool e fumo), le difficoltà economiche e la chiusura di alberghi."*

52 High investment costs for places who want to adapt the architecture

All arguments that hold that owners of bars, restaurants etc, all other institutions affected by the ban will have high costs for rebuilding their places to accommodate smokers in special rooms

> Example: *„Costerà caro il permesso di fumare nei bar ticinesi. Una fattura salata, di 25 milioni di franchi per realizzare una sala fumatori indipendente e ben aerata nei bar, ristoranti, snack bar, discoteche e birrerie sparsi in tutto il cantone"*

53 Expectation of low compliance

All arguments founded on statements that mention the expectation of low compliance with the law

54 Bad experiences in other countries with smoking bans, unspecified

All arguments that mention bad experiences, failed hopes in other countries with a ban on smoking in public places. Specified statements (e.g. on negative economic consequences of the introduction of the ban in other contries) are coded as if this were an expectation of what will happen in the geographic area the argument refers to.

> Example:*"Ha ricordato inoltre che solo in poche nazioni europee (Italia e Irlanda) si è giunti a tanto e in nessun cantone Svizzero. Anzi. "*

55 Bad experience with earlier regulation in Switzerland

All statements that mention bad experiences with respective regulations in Switzerland, especially with the 1994 regulation and the assumptions that it did not change much

> Example: *„La legge sugli esercizi pubblici del 1994, però, è chiara: un terzo die tavoli deve essere riservato ai non fumatori. Ma non sempre e dappertutto la legge è legge, come ha evidenziato il nostro tour in una trentina di locali pubblici, snack bar e ristoranti ticinesi."*

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

56 Cantonal vs. federal competence, nation-state vs. international

All arguments that hold it would be appropriate or preferable not to regulate smoking in public places in the canton, but rather wait for a nation-wide regulation from the federal government. The category is also chosen for arguments that a nation-wide regulation should wait for a EU-level regulation, or any other international one.

2.5. Tendency

Here it is to be coded to which use (pro ban or against ban) an argument is used. An argument pro ban that is merely stated, affirmed, put forth is always coded as pro ban. If it is, however, refuted, contradicted, if doubt is cast over it, it's validity questioned, it is coded as against the ban. Arguments against the ban are treated accordingly. The combination of coding of argument and tendency has to mirror the source's intention.

Types of coding tendency

	Argument for the ban	Argument against the ban
Argument is affirmed	PRO	AGAINST
Argument is refuted, contradicted, rejected	AGAINST	PRO

Coding

01 PRO ban

02 AGAINST ban

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Codeplan Medium

Daily newspapers	11	Basler Zeitung
	12	Berner Zeitung
	13	Blick
	14	Giornale del Popolo
	15	Corriere del Ticino
	16	La Regione
	17	Mittelland Zeitungen, MLZ
	18	Vingtquatre Heures
	19	Neue Zürcher Zeitung (NZZ)
	20	Tribune de Genève
	21	Tagesanzeiger
	22	Le Nouvelliste
	23	Le Temps
	24	Matin Semaine
Sunday newspapers	31	Il Caffè
	32	Sonntagsblick
	33	Matin dimanche

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Codeplan Sources

110 Journalists

210 Medical doctors, medical experts

310 Institutions of health information, desease prevention, health care (ISPA, ASNF, Lega polmonare ticinese, Lega „Vita e Salute“ etc.)
330 Institutions of public transportation
350 Associations or commissions that defend the rights of smokers
390 Other Institutions and Association/ Unspecified Institutions and Associations (school, universities, theaters, companies like Novartis and other economical companies, ecological not political associations etc)

410 Swiss Gastronomic Associations
- 421 Ticino Gastronomic Associations
- 422 Aargau Gastronomic Associations
- 423 Appenzellerland Gastronomic Associations
- 424 Appenzellerland Gastronomic Associations
- 425 Bern Gastronomic Associations
- 426 Baselland Gastronomic Associations
- 427 Basel-Stadt Gastronomic Associations
- 428 Fribourg Gastronomic Associations
- 429 Genève Gastronomic Associations
- 430 Glarnerland Gastronomic Associations
- 431 Graubünden Gastronomic Associations
- 432 Jura Gastronomic Associations
- 433 Luzern Gastronomic Associations
- 434 Neuchâtel Gastronomic Associations
- 435 Nidwalden Gastronomic Associations
- 436 Obwalden Gastronomic Associations
- 437 St. Gallen Gastronomic Associations
- 438 Schaffhausen Gastronomic Associations
- 439 Solothurn Gastronomic Associations
- 440 Schwyz Gastronomic Associations
- 441 Thurgau Gastronomic Associations
- 442 Uri Gastronomic Associations
- 443 Vaud Gastronomic Associations

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

444 Valais Gastronomic Associations
445 Zug Gastronomic Associations
446 Zürich Gastronomic Associations

450 Associazione ticinese dei bar (Patrick Chappuis: President)
460 Other gastronomic associations, clubs

510 PPD – Partito Popolare Democratico;
PDC (PCD) _ Parti démocrate chrétien;
CVP _ Christlichdemokratische Volkspartei
520 PS – Partito Socialista;
PS _ Parti socialiste;
SP _ Sozialdemokratische Partei = LEFT
530 PLR – Partito Liberale Radicale;
PRD _ Parti radical-démocratique
FDP _ Freisinnig-Demokratische Partei
540 Lega dei ticinesi = RIGHT
550 UDC _ Unione Democratica di Centro;
UDC _ Union Démocratique du Centre;
SVP _ Schweizerische Volkspartei = RIGHT
560 Green party
570 PEV_ Partito evangelico swizzero
PEV_ Parti évangélique
EVP_ Evangelische Volkspartei der Schweiz

580 Gran Consiglio (legislativo) – here all the different commissions like Legislativa
Assemblée Fédérale (Grand Conseil et Conseil des Etats) – le législatif
Parlament (Nationalrat und Ständerat) – das Legislative
590 Consiglio di Stato (esecutivo)
Conseil fédéral (pouvoir exécutif fédéral)
Bundesrat (Exekutive des Bundes)
591 Department for Health and Society
592 Department of Education, Culture and Sport
593 Department for the Territory
594 Department for Finance and Economy
595 Department of Institutions

600 UFSP Ufficio Federale della Sanità pubblica
OFSP Office fédérale de la santé publique
BAG Bundesamt für Gesundheit
610 Other Swiss politicians

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland
Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

These are general cathegories for all the countries, not only for Switzerland

710 Regular People

720 Tourists

730 Bar owners without mentioned affiliation to any of the associations

740 Restaurant owners (without affiliation)

750 Hotel owners (without affiliation)

760 Police and other Authorities

770 Workers of Restaurants, bars and hotels

810 Statistical studies and companies

820 Tobacco industry and trade

830 Technological companies of air conditioning

840 Tobacco farmers

This distinction refers to all the political organs of other countries

901 Politicians in other countries

902 Political Institutions in other countries

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org

Codeplan geographical indication

01 Ticino (TI)
02 Appenzello Esterno (AR)
03 Appenzello Interno (AI)
04 Argovia (AG)
05 Basilea Campagna (BL)
06 Basilea Città (BS)
07 Berna (BE)
08 Friburgo (FR)
09 Ginevra (GE)
10 Giura (JU)
11 Glarona (GL)
12 Grigioni (GR)
13 Lucerna (LU)
14 Neuchâtel (NE)
15 Nidvaldo (NW)
16 Obvaldo (OW)
17 San Gallo (SG)
18 Sciaffusa (SH)
19 Soletta (SO)
20 Svitto (SZ)
21 Turgovia (TG)
22 Uri (UR)
23 Vallese (VS)
24 Vaud (VD)
25 Zugo (ZG)
26 Zurigo (ZH)

28 Single cities, regions smaller than cantons
29 Confederation

31 Any other single European country, or part of a country
32 European Union
33 German Swiss linguistic part
34 French Swiss linguistic part

41 Any other single country outside Europe, or part of a country
91 Other, unspecified

Health Care Communication Laboratory
Università della Svizzera italiana
Facoltà di Scienze della Comunicazione
Via G. Buffi, 6900 Lugano - Switzerland

Tel: +41 (0) 58 666 47 67
Fax: +41 (0) 58 666 46 47
E-mail: hcc-lab@lu.unisi.ch
Web: www.hcc-lab.org